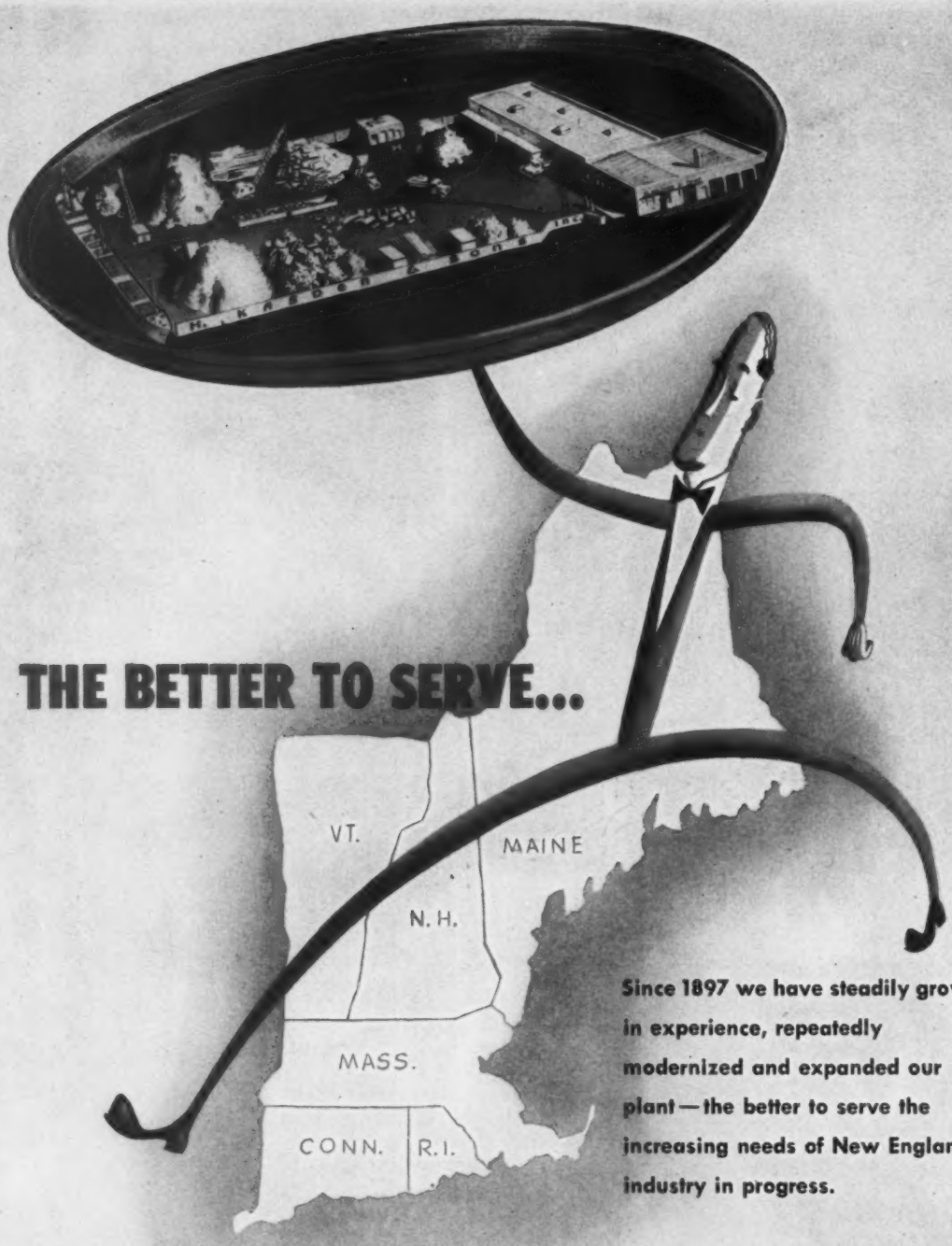
Connecticut INDUSTRY

OCTOBER 1948



Since 1897 we have steadily grown in experience, repeatedly modernized and expanded our plant—the better to serve the increasing needs of New England industry in progress.

Scrap iron, steel, metals

H. KASDEN & SONS

Incorporated

2-44 LLOYD STREET • NEW HAVEN, CONNECTICUT

Connecticut INDUSTRY

MANUFACTURERS' ASSOCIATION OF CONNECTICUT, INC.

VOL. 26 - NO. 10 - OCTOBER, 1948

L. M. BINGHAM, *Editor*

IN THIS ISSUE

	Page
Editorial	7
A Centennial Chronicle	8
Connecticut Industries Important Feature of 1948 Eastern States Exposition	11
For the Want of a Horseshoe Nail	12
News Forum	17
Business Pattern	34
Transportation	35
Taxation	36
Accounting Hints	37
Business Tips	39
Service Section	42
Fair Trial Marching with Democracy from Sea to Shining Sea—Part II	43
It's Made in Connecticut	49
Advertising Index	56

OFFICERS

EDWARD INGRAHAM ..... *President*
WILLIAM A. PURTELL ..... *Vice President*
A. V. BODINE ..... *Vice President*
N. W. FORD ..... *Executive Vice President*
JOHN COOLIDGE ..... *Treasurer*
L. M. BINGHAM ..... *Secretary*

ADMINISTRATIVE STAFF

N. W. FORD ..... *Executive Vice President*
L. M. BINGHAM . *Sec. and Dir. of Development*
JOHN P. AHERN ..... *Executive Assistant*
FREDRICK H. WATERHOUSE ..... *Counsel*
DANIEL B. BADGER ..... *Attorney*
E. H. TUTHILL .. *Traffic and Export Manager*

DEPARTMENTAL STAFF

MARION R. RAITES — FLORENCE E. KRUK
RUTH C. JOHNSON — MILDRED H. FORSELL
KATHERINE C. EDGERTON — BERTHA R. HUME
EVELYN R. BONZAK — IRENE C. SCHILLINGER
AGNES M. KRISTOF — MARGARET M. MOORE
VINCENT D. CASTAGNO

DIRECTORS

W. D. KIMBALL ..... *Portland*
CHARLES E. HART, JR. ..... *Waterbury*
W. R. HOYT ..... *Stamford*
F. R. HOADLEY ..... *Ansonia*
F. S. NETTLETON ..... *Rockville*
MALTBY STEVENS ..... *Meriden*
CLAYTON R. BURT ..... *Hartford*
ALLERTON F. BROOKS ..... *New Haven*
JOHN C. CAIRNS ..... *New Britain*
HENRY C. HASKELL ..... *Moosup*
DAVID AYR ..... *Torrington*
WILLIAM S. LOWE ..... *Winsted*
ROBERT B. DAVIS ..... *Bridgeport*
SYDNEY A. FINER ..... *Clinton*
H. R. GIESE ..... *New Haven*
MORGAN PARKER ..... *Danbury*
F. C. PARIZEK ..... *West Willington*
W. W. ALLAN ..... *Baltic*
E. B. SHAW ..... *Willimantic*
ALFRED C. FULLER ..... *Hartford*

Published monthly by the Manufacturers' Association of Connecticut, Inc., with executive offices at 436 Capitol Avenue, Hartford, Connecticut. Entered as second-class matter January 29, 1929, at the post office at Hartford, Connecticut, under the Act of March 3, 1879. As the official magazine of the Manufacturers' Association of Connecticut, Inc., it carries authoritative articles and notices concerning the Association activities. In all other respects the Association is not responsible for the contents and for the opinion of its writers. Subscription rates: one year, $2.50; 25¢ a copy. Subscribers should notify publisher promptly of changes in address. Advertising rates on application.

WILL HE WORK AGAIN?

A true story with a moral for Connecticut businessmen

A worker fell and was pinned down by the wheels of a loaded truck. He was rushed to the hospital. X-ray plates showed that he had fractured both legs.

Week by week Liberty Mutual followed the progress of the injured man closely. In six weeks he was discharged from the hospital, yet the injury to his legs still prevented him from walking normally. His doctor prescribed treatments at Liberty Mutual's Rehabilitation Center in Boston. There he received the most up-to-date physical and occupational therapy, and at the end of three months was ready to return to work.

From six branch offices in Connecticut and 108 others from coast to coast, Liberty Mutual claimsmen are available to serve you anywhere, anytime . . . to follow up and control claims closely . . . to restore injured workers more quickly to full employment.

This is only one of the many ways Liberty Mutual works to keep you safe from excessive insurance premiums . . . safe from accidents to employees . . . safe from inadequate insurance. It all adds up to strong protection at low cost.

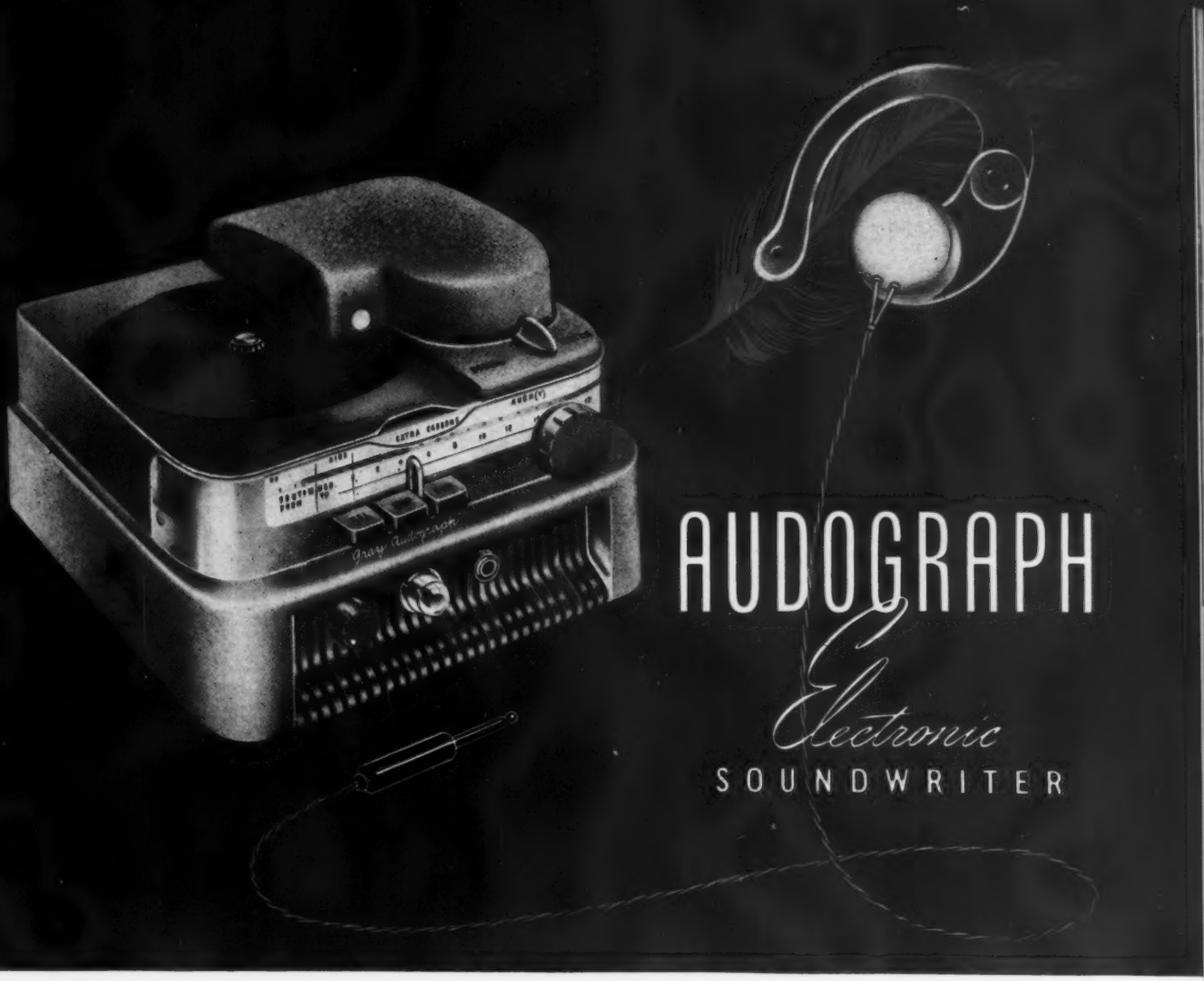
For complete information, write or telephone any one of our Branch Offices listed below.

LIBERTY MUTUAL
INSURANCE COMPANY
HOME OFFICE: BOSTON

The leading writer of Compensation Insurance in America

★ *We work to keep you safe* ★

177 State Street—Bridgeport 3, Tel. 54161
10 Allyn Street—Hartford 1, Tel. 77131
65 Whitney Avenue—New Haven 5, Tel. 73541
322 Main Street—Stamford, Tel. 47323
20 East Main Street—Waterbury 22, Tel. 52291
51 Empire Street—Providence 3, R. I., Tel. Gaspee 2600



Now . . . Your Secretary Can Keep Pace With You Accurately!

THE NEW AUDOGRAPH not only helps you get more work done easier and better, but also helps your secretary expedite it with uncanny accuracy!

The secret lies in a combination of AUDOGRAPH features making transcription effortless, eliminating distractions, and concentrating your secretary's attention *on your dictation only!*

The new AUDOGRAPH gives her control of volume and tone, with understandability achieved by no other dictation system. With the patented AUDOGRAPH Electromatic Index she can clearly see the length, beginning and end of messages. She can spot and hear corrections before beginning to type. She can start, stop instantly, split syllables if she wishes, backspace anywhere. She can listen through a Feathertone Earpiece, tiny as an earring, or even on a sound beam — with no earpiece at all!

WHEN YOU CONSIDER how much your secretary's speed *with accuracy* increases your own executive accomplishment, when you consider all the superior features of the AUDOGRAPH . . . then you will understand the importance of knowing more about the AUDOGRAPH *before* you decide on any other dictation system.

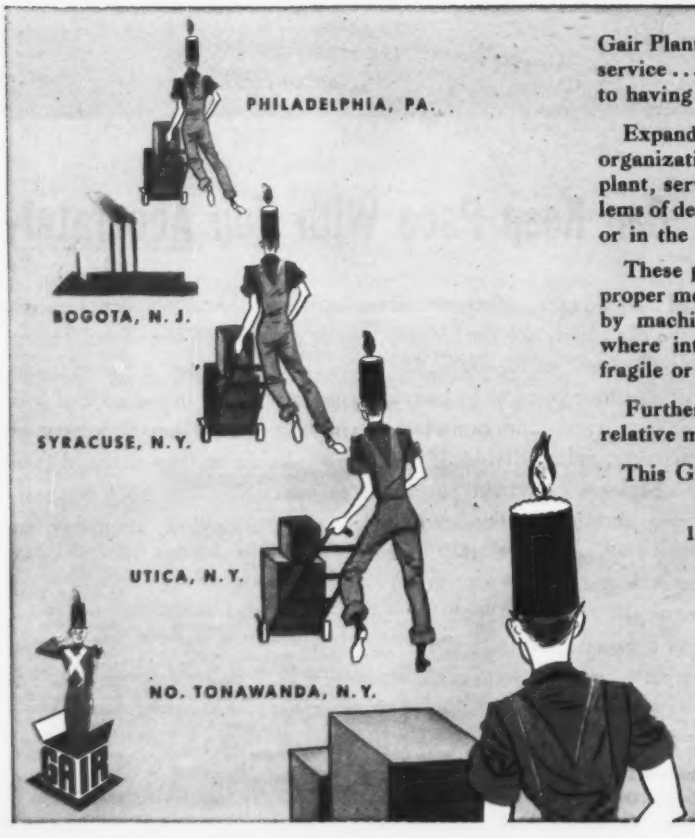
CALL AUDOGRAPH, YOUR CITY, FOR FREE TRIAL IN YOUR OFFICE—TODAY!

Atlanta, Ga.
Austin, Tex.
Baltimore, Md.
Birmingham, Ala.
Boston, Mass.
Bridgeport, Conn.
Buffalo, N. Y.
Charlotte, N. C.
Chatttanooga, Tenn.
Chicago, Ill.
Cincinnati, Ohio
Columbia, S. C.
Dallas, Tex.
Denver, Colo.
Fall River, Mass.
Fort Worth, Tex.
Greensboro, N. C.
Greenville, S. C.
Hartford, Conn.
Hattiesburg, Miss.
Houston, Tex.
Huntsville, Ala.
Jacksonville, Fla.
Johnson City, Tenn.
Knoxville, Tenn.
Laconia, N. H.
Lacrosse, Wis.
Lafayette, La.
Little Rock, Ark.
Los Angeles, Calif.
Louisville, Ky.
Lubbock, Tex.
Macon, Ga.
Madison, Wis.
Memphis, Tenn.
Miami, Fla.
Midland, Tex.
Milwaukee, Wis.
Mobile, Ala.
Montgomery, Ala.
Montpelier, Vt.
Nashville, Tenn.
Newark, N. J.
New Haven, Conn.
New Orleans, La.
New York, N. Y.
Orlando, Fla.
Pittsburgh, Penn.
Providence, R. I.
Racine, Wis.
Raleigh, N. C.
Richmond, Va.
Rochester, N. Y.
Salem, Va.
San Antonio, Tex.
Sheffield, Ala.
Shrevenort, La.
Springfield, Mass.
Syracuse, N. Y.
Tampa, Fla.
Washington, D. C.

For descriptive literature write to **THE GRAY MANUFACTURING COMPANY,**
W. E. DITMARS, President, 16 ARBOR ST., HARTFORD, CONN.
GRAY MFG. CO., GOVERNMENT DIVISION—McLACHLEN BLDG., WASH., D. C.
Foreign Distributation, Westrex Corporation
(Western Electric Export Corporation)

STRATEGIC PLANT LOCATIONS

make ROBERT GAIR your next-door neighbor



Gair Plants are strategically located to render maximum service . . . a CONTAINER SERVICE that is almost equivalent to having a GAIR PLANT in "YOUR OWN BACK YARD."

Expanding beyond shipping facilities, the ROBERT GAIR organization provides technical cooperation. At each plant, service engineers are available to help solve problems of designing or redesigning your present containers, or in the creation of new containers for new products.

These packaging engineers are prepared to advise on proper methods of sealing containers, either by hand or by machine. This technical information is invaluable where interior packing has been designed to protect fragile or valuable merchandise.

Furthermore, these GAIR REPRESENTATIVES know the relative merits of corrugated, solid fibre, jute and Kraft.

This GAIRanteed service is available for the asking.

Write for your Free Copy of

1. Sealing of Corrugated and Solid Fibre Containers, *or*
2. Container Handbook.

ROBERT GAIR COMPANY, INC.

NEW YORK • TORONTO

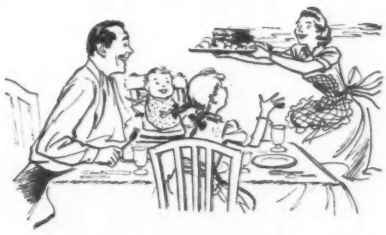
PAPERBOARD • FOLDING CARTONS

SHIPPING CONTAINERS

You live so much better (and more economically) when you own a Home Freezer...

When you own a Home Freezer, you can have fresh food like this at your elbow all year round: lamb, broilers, veal, steaks, corn, peas, ice cream, strawberries—even cakes, breads, rolls, cookies, and pies!

You pay less for meats, fruits, vegetables because you buy at *sale* prices . . . keep food for months . . . when prices may be much higher. It's so easy to wrap meats in moisture-vaporproof paper and *freeze* in a Home Freezer!



You can get dinner ready in half the time. You can set a wonderful table for unexpected guests. No more marketing when you've a headache or the children are sick. There's more time for the things you really want to do!

...but be sure the Home Freezer you invest in is a dependable General Electric

This is an 8-cu-ft General Electric Home Freezer. Also available in 4-cu-ft.

When you consider the following facts, we think you will agree that the General Electric Home Freezer is your *best* investment.

This is the Home Freezer that has the sealed-in refrigerating system—the very same type that has proved so dependable in G-E Refrigerators.

More than 1,700,000 of these sealed systems have been giving economical service in G-E Refrigerators 10 years or longer!

You get *Perfect Seal* cabinet construction, too, in a General Electric Home Freezer. It helps maintain zero temperature throughout the cabinet. It prevents moisture from reaching the 4-inch thickness of Fiberglas insulation.

The General Electric Home Freezer has been designed with convenience in mind.

The wire baskets hold your packages in neat, orderly arrangement.

See these remarkable G-E Home Freezers at your General Electric retailer's as soon as you can, or write for interesting booklets to General Electric Company, Bridgeport 2, Connecticut.

General Electric Home Freezers

For *quick-freezing* foods at home...

For *storing* the frozen foods you buy

GENERAL ELECTRIC

YOUR TRADE MARK...

in the Yellow Pages of telephone directories

FOLLOWED BY...

a list of your dealers

MEANS...

quick, sure identification of your product with your dealers

AND MORE SALES.

Take a look at the trade marks in the Yellow Pages of your own telephone directory. See how you can get more effective distribution. Let one of our representatives tell you all about it — at no obligation of course. Just call your local telephone business office.

The Southern New England TELEPHONE Company

Owned and operated by and for Connecticut people since 1882

DOWD WYLLIE & OLSON INC.

PHOTO ENGRAVING
ADVERTISING ART

Since 1913

106 ANN ST · HARTFORD, CONN.

Many Styles of Work for Many Purposes

CASE, LOCKWOOD & BRAINARD

DIVISION OF
Connecticut Printers
INCORPORATED

Hartford, Connecticut

Wanted: A Reversal of Our Spend and Tax Philosophy

By EDWARD INGRAHAM, *President*

BARRING a war which will require us to shoulder even heavier taxes to be spent for armaments, the time to call a halt on ever-increasing spending is long overdue. Although the need for reducing the spending of public funds taken from the people in taxes exists in our states and municipalities, it is far more urgent in Federal Government, which spent over $5.00 in the fiscal year ending in June 1948 for every $1.00 it spent in fiscal year 1938. To support this five-fold increase in spending, taxpayers were required to pay $7.00 in 1948 for every dollar they gave up to the Federal Government ten years ago. Our peacetime spending in 1948 reached the astronomical total of $39,326,000,000, counting the $3,000,000,000 set aside for the first year's operation of the European Recovery Program —a sum substantially greater than the government spent during the entire period of our participation in World War I.

The only bright spot in the fiscal picture for 1948 is the fact that the Treasury Department was able to retire nearly $6,000,000,000 of our national debt from the excess of government income from taxes over expenditures. But this seemingly good showing provides small reason for applause when one takes into account the fact that our national debt was still $252,000,000,000 at the end of the 1948 fiscal year. Even if the debt continued to be retired at this unprecedented rate, it would require 42 years or until 1990 to liquidate it. In addition, funds for payment of annual interest would have to be made available.

In the face of continuing high costs of the European Recovery Program, substantially higher costs for national defense in an unsettled world and continuing high outlays for veterans' programs—all a direct outcome of World War II—how may the present trend to "tax and tax and tax and spend and spend" be reversed? The answer is so simple it is almost trite. It is merely to call a halt to the spending of ever-increasing sums, barring war necessity, until our population increase can shoulder additional expenditures without increasing the per capita burden of taxation. The per capita burden increased for the individual taxpayer in the past decade from $282 to $447. Everyone agrees that it would be impossible to return to 1938 levels of spending and taxation. Considering our large growth in population and the commitments thrust upon us by World War II, it is a virtual necessity, if we are to remain a strong nation, that we effect some stringent economies. We need to listen more to the recommendations of Senator Byrd and his Committee on Government Economy if we would reduce the number of Government agencies and personnel and thereby cut the present payroll from around $6,000,000,000 annually to $4,000,000,000 or less. Granted that it may be necessary to increase expenditures for the armed forces, it should be the policy of the Federal Government not to add these costs willy-nilly to the national budget but to seek greater efficiency both in the administration of the armed forces and in other areas in order to hold expenditures down to or below present levels, including substantial payments annually on the public debt.

We hear much talk about inflation, but too few people in political office are willing to admit that many actions of government have contributed greatly to the inflationary movement. Instead of admitting: (1) That unwise commitments to Russia before the war's end; (2) that the encouragement of union leaders in demanding higher pay for no more work; (3) that letting down the bars on wage controls before other controls were lifted and; (4) that unwise handling of the farm parity program, added up to untold billions of dollars of expense to the American people, our present Administration blames the rising spiral of inflation upon a Republican Congress for making some slight cuts in spending and in taxes. Likewise, in chorus with the leftwingers and Communists, whose progress seems to be measured by the number of strikes and civil disturbances they can foment, the Administration further lays the blame for inflation upon the N.A.M. and on corporations who were forced to increase their prices largely because the unwise actions of government have forced increases in production costs.

Let us look at only one or two illustrations of government actions which have contributed to the cost of government and to the cost of living—both inflationary.

On one of numerous similar occasions the government, under its parity program, paid $2.90 to Maine farmers for 100-pound bags of quality potatoes. After adding $1.10 for shipping charges to Chicago, plus storage, the potatoes cost taxpayers $4.00 per bag. The potatoes were then sold to hog raisers for the ridiculous price of one cent per bag. One farmer bought 1800 bags for $18 which cost taxpayers $7,200, and resold them for $180, thus making a profit of $162. Meantime, Mrs. Consumer, the taxpayer's wife, was paying nearly 7¢ per pound at retail for potatoes.

Take the case of the Wage-Hour Act and its inflationary effect. When it was passed it increased the production cost of goods made in all industries covered after the 40th hour of work by 50%. I am not here arguing the fairness or unfairness of paying employees 1½ times as much for every hour worked over 40 in a given week, but rather, to point out that 50% more pay for work done after 40 hours when productivity tapers off is an additional burden upon the producer and ultimately upon the consumer, unless production is increased by a like amount. These tremendously increased costs were added burdens laid upon the taxpayer for the cost of World War II. Since work hour schedules during the war years indicate that anywhere from 20% upward of the hours spent in factories, shipyards and construction projects were overtime hours, it is easy to see that war goods cost the American taxpayer many billions of dollars more because of the demand of government for the passage of the Wage-Hour Act. Since the close of the war the Act has worked two ways. First, it has increased costs where demand far outstripped supply. Second, where competition set in, it forced close adherence to the 40-hour week, thus robbing thousands of men of the oppor-

(Continued on page 25)

THE FARREL PLANT IN ANSONIA about the time of the Civil War.

A Centennial Chronicle

Farrel Plant at Ansonia, Leading Manufacturer of Heavy Industrial Machinery, Observes 100th Anniversary

ONCE again Connecticut's industrial history gains luster, this time with the observance of the Farrel Centennial, which marks the 100th anniversary of the founding of the Ansonia plant of Farrel-Birmingham Company, Inc., pioneer manufacturers of heavy industrial machinery for many important industries.

Here is a firm which, in typical New England fashion, has progressed steadily with the growth of the industries which it has helped to develop and now serves. The small foundry established by Almon Farrel in 1848, employing a handful of people, has grown beyond any dreams its founder could possibly have had for it. Today it provides in three large plants located in the Naugatuck Valley cities of Ansonia and Derby, and in Buffalo, New York, employment for 2,200 people skilled in engineering, the foundry arts and the intricacies of machine shop practice.

Probably no other company supplies so many industries with such a great variety of machines, many of which are exclusive in their basic design. In addition to complete machines, output also includes rolls for many uses, gears, castings and weldments. The machinery and equipment manufactured in these three plants enjoy a world-wide reputation for sound design, high quality workmanship and dependable performance, in such important industries as rubber, plastics, paper, sugar and metalworking, as well as a number of others. Farrel-Birmingham machinery is used in every industrial country in the world, and during the past year alone, shipments have been made to Cuba, Santo Domingo, Puerto Rico, Mexico, Colombia, Venezuela, Brazil, Argentina, Uruguay, Chile, Peru, Hawaii, Philippines, China, India, England, France, Spain, Portugal, Belgium, Norway, Switzerland, Sweden, South Africa, Australia and Canada, as well as throughout the United States.

During its first century, the company has followed a fixed policy of constantly improving facilities and products, not only keeping pace with the requirements of the industries it serves, but leading in the development of machines which increase productivity, improve quality of output and reduce manufacturing costs. It looks forward to a second century of even greater progress in the building of machines that will contribute to economic advancement by supplying more goods at lower cost to a greater number of people.

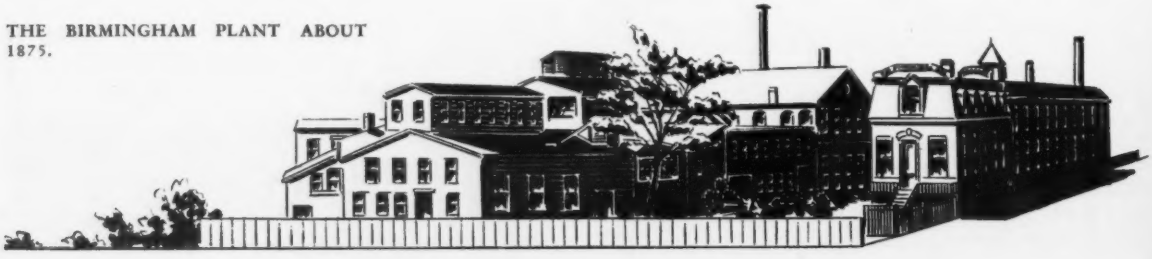
The Early Years

Farrel-Birmingham Company, Inc., is a combination of two pioneer Connecticut firms, Farrel Foundry and Machine Co., which had its beginning a century ago this year, and Birmingham Iron Foundry, founded twelve years earlier, in 1836.

In 1848, Almon Farrel and his son, Franklin, built a foundry and machine shop in what is now Ansonia, Connecticut. Early products of the company were brass and iron castings, wooden mortise gears and parts for water-power plants, but it was not long before the firm began to expand into other fields.

In the years that followed, Farrel Foundry & Machine Co., specialized

THE BIRMINGHAM PLANT ABOUT 1875.



in the manufacture of rolling mill equipment for the rapidly expanding copper and brass industries in New England. It also pioneered in the development of processing machinery for the rubber industry which had started its important growth following the discovery of vulcanization by Charles Goodyear in nearby Naugatuck in 1839.

Rolls and calenders were made for the paper industry and mill equipment for cane sugar factories in the West Indies. About 1875 the manufacture of stone and ore crushers was started for the growing mining industry and the expanding fields of building and road construction.

In 1920 the company acquired another plant in Buffalo to take care of increased demand for its products and to specialize in the manufacture of gears, gear drives and gear generating machines.

Along an Adjacent Path

During this time, Birmingham Iron Foundry was traveling a similar path in the neighboring city of Derby. One of the first eight businesses to be incorporated under the laws of the State of Connecticut, the company was among the first in the United States to manufacture chilled iron rolls, which, until this period, had to be imported from England.

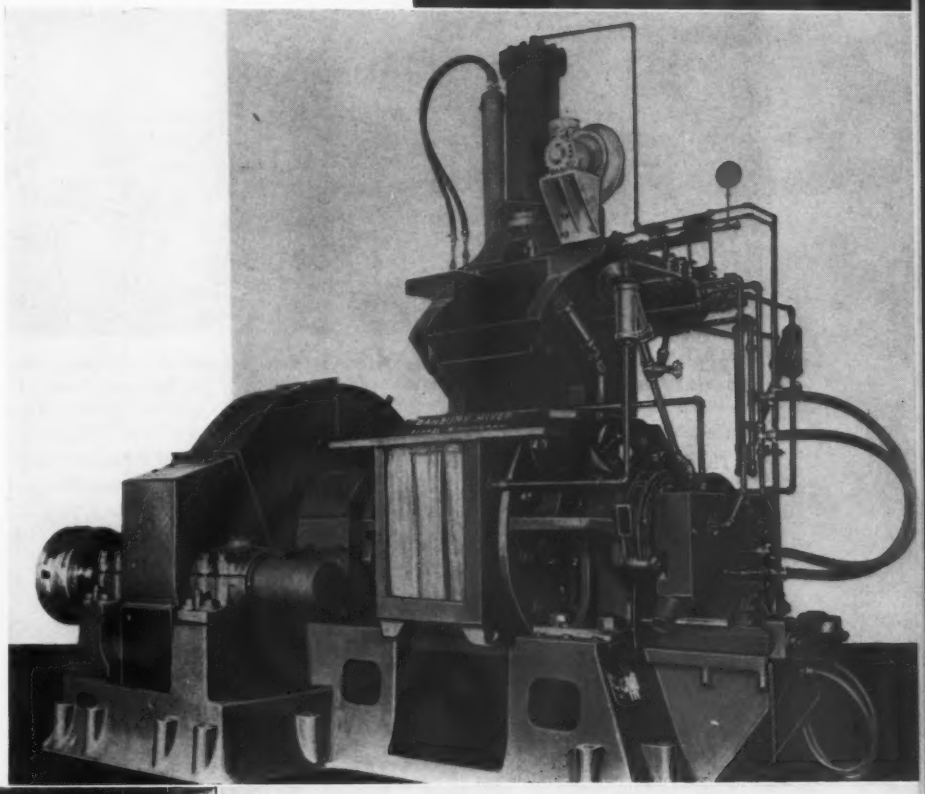
Other products included machines for making wire nails, axe polls and pickeyes, and for rolling bayonets and gun barrels; rolling mills for steel, brass and precious metals; heavy hydraulic presses; and precise, light machines for cutting in quantity the finest textiles.

The concern introduced a number of new designs and improved machinery for the rubber industry, including the bias cutter, hydraulic belt stretcher, multiple roll calenders, the Gordon plasticator, and the Banbury mixer, which has since become one of the most, if not the most, important single machine used in the rubber industry today.

In 1927 Birmingham Iron Foundry merged with Farrel Foundry & Machine Co. and the united companies were incorporated under the present name, Farrel-Birmingham Company, Inc.

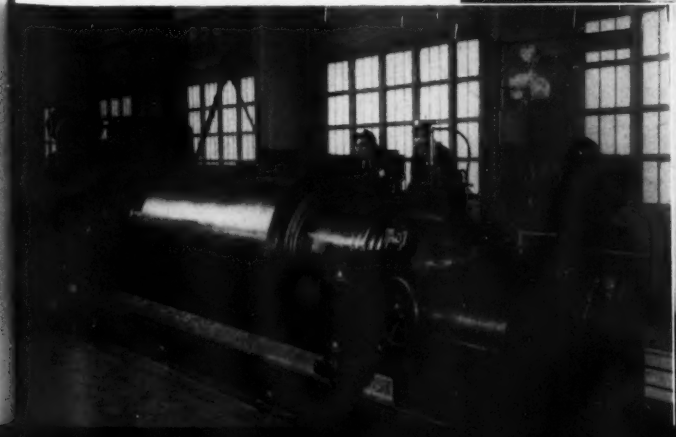
(Right) FARREL 28″ x 30″ two-high mill rolling bullet jacket brass in Chicago Ordnance Plant of Revere Copper & Brass, Inc.

(Below) THE BANBURY MIXER is an important unit in the processing of both natural and synthetic rubbers and many other plastic materials.



(Lower left) GRINDING A 59″ diameter by 130″ face steel backing up roll weighing 63 tons in Farrel heavy duty roll grinder at Geneva Steel Works, Provo, Utah.

(Lower right) THE GORDON PLASTICATOR breaks down rubber to soften it preparatory to further processing.



THREE MODERN FARREL-BIRMINGHAM PLANTS at Ansonia (top); Derby (center); and Buffalo, New York (bottom).

Through Four Major Wars

During four different periods of the company's history its production facilities have been diverted from building peacetime products to the manufacture of equipment for war. During the Civil War, machines for rolling bayonets and gun barrels were built, and other foundry and machine-shop work carried on in both Ansonia and Derby helped contribute to the munitions supply of the Northern armies. Again in the Spanish-American War, munitions-making equipment was turned out. During World War I, gun carriages, gun-boring lathes, shell presses, depth-charge Y guns and projectiles, and turbine casings supplemented production of industrial machinery.

In World War II the company's production capacity was devoted to the manufacture of war equipment and machinery for turning out war supplies. Propulsion gearing was supplied for destroyer escorts, both steam and Diesel, medium-sized patrol craft, light seaplane tenders, submarines and their tenders, mine sweepers, medium landing craft, tugs, and miscellaneous service vessels. Complete gear units were built for forty-nine C-1A Diesel cargo vessels and twenty-seven V4-Ma-1 Diesel tugboats, and rotating elements for forty-one steam-turbine-driven Victory ships.

Farrel-Birmingham assumed the responsibility for the production of the major portion of the rubber mixing and milling equipment required for the military tire program in 1943 and 1944.

Other equipment included: molds for centrifugal casting of gun barrels; roll mills and calenders for the manufacture of explosive powder; thirty-six huge hydraulic presses to extrude brass for cartridges, condenser tubing for ships, aluminum and magnesium parts for airplanes, etc.; hydraulic presses for forming airplane parts, mills for rolling cartridge brass; as well as large volume of castings and gears supplied to important ordnance producers.

Excellence of war effort was given early recognition with the award of the Navy "E" to the men and women of Farrel-Birmingham in March, 1942. This award was renewed five times before the war ended. The Buffalo plant was the first plant in the Buffalo area to receive this award and the Ansonia and Derby plants were among the first in New England to be so honored.

In 1944, the Maritime "M" and Victory Fleet Flag were awarded to the three plants of the company, and in this year also the Treasury Minute Man Flag was awarded to the employees for over 90% participation in the pay-roll savings war-bond program.

Farrel-Birmingham Today

Present facilities include three modern manufacturing plants located at Ansonia and Derby, Connecticut, and Buffalo, New York, with a combined area of thirty acres of plant floor space and forty acres of yard and open storage space.

The company operates at Ansonia the largest specialty roll shop in the world. Here rolls are made for such diverse uses as processing rubber, plastics, linoleum, celluloid, phonograph record blanks, asphalt, asbestos, ink, paint and soap; calendering paper and textiles; rolling metal; grinding flour, coffee and sugar cane; crushing tobacco stems; and extracting oil from linseed and cottonseed.

Two giant rolls, the heaviest ever made for calendering paper, were recently completed in this shop. Forty inches in diameter, with a 276-inch face and an overall length of 373 inches, each of these rolls weighed 75 tons in the rough. They were cast in a 35-foot deep, vertical pit, then machined and ground to a mirror finish.

Farrel-Birmingham is the largest producer in the country of rubber processing machinery. The company has maintained close contact with the rubber industry for nearly a century, and has developed many new products which have kept pace with, and, in many instances, have anticipated, the changing needs and more exacting requirements of this industry.

As early as 1854 the company built the first calender for Charles Goodyear,

(Continued on page 27)

Connecticut Industries Important Feature of 1948 Eastern States Exposition

EXHIBITS depicting products and actual processes of Connecticut industry as well as many of the activities carried on by various state departments were viewed by a record-breaking number of visitors to the Connecticut Building during the September 19-25 showing of the 1948 Eastern States Exposition.

The show in Connecticut's colonial-design structure at the big West Springfield fair grounds was under the management of the State Development Commission, whose Eastern States Exposition committee brought Connecticut industry into the state building for the second time since taking over the building. The Development Commission took over the management by legislative decree from the former board of trustees last year. Its member committee in charge consisted of Raymond A. Loring, general information manager, Southern New England Telephone Company; C. E. Smith, vice president of the New Haven Railroad; and State Commissioner of Labor John J. Egan.

Four world-renowned Connecticut industries displayed their wares and some of their manufacturing processes on the main floor of the Connecticut Building while twelve others had commercial-type exhibits in the Exposition's Industrial Arts Building.

The theme of the show within a show at the handsome Connecticut edifice portrayed in a comprehensive fashion the reasons why this State has acquired since its earlier days the reputation of craftsmanship and skill in industry and why its manufactured products are so avidly sought in the markets of this country and of the world.

CONNECTICUT'S BUILDING AT THE EASTERN STATES EXPOSITION

Other aspects of Connecticut's economy were not overlooked, for two of the participating state departments had displays which symbolized the extensive agricultural and recreational facilities which the State offers.

Due to the fact that industry has always held a dominant position in building a sound economy throughout the State's history, the larger display spaces were given over to the manufacturing exhibits, and these booths contained such noted Connecticut products as silverware, clocks and watches, aircraft engines and educational toys. To carry out the principle of animation underlying all of the exhibits in the 1948 show, actual production operations were performed by expert workers in some of the displays while in others the products themselves were seen in operation.

Highly skilled craftsmen from the R. Wallace & Sons Manufacturing Co. of Wallingford demonstrated for visi-

(Continued on page 28)

SOME OF THE THOUSANDS OF VISITORS who crowded into the Connecticut building stopped to marvel at the wonders of the state's aircraft industry. In the foreground is a Wasp Major engine, mounted in simulated flight position.

A TYPICAL INTERIOR VIEW OF a Connecticut small tool and die shop.

ON SOME FINE DIE WORK nothing takes the place of a hand file—in a craftsman's hand.

PRECISION MEASUREMENT BY MAGNIFICATION.

For the Want of a Horseshoe Nail*

CONNECTICUT INDUSTRY SALUTES THE SPECIAL TOOL AND DIE INDUSTRY by publishing some of its highlights on the road to recognition as an industry. Still tormented by a lack of understanding on the part of government tax officials and some businessmen, the versatile and venturesome owner-operators of over 100 tool shops in Connecticut and over 3,000 in the country are staging a heroic battle for full recognition of their industry as a necessary bulwark to national defense during wartime and an effective tool to increase the efficiency of American production industries during peacetime.—*Editor's Note.*

TIME and invention has moved a long way since Ben Franklin wrote his lines in Poor Richard's Almanac about the horseshoe nail, but if he were to write in similar vein today he would doubtless change the rhythm of his writing to say, "For the want of a tool, a die, a jig or a fixture a war for freedom was lost."

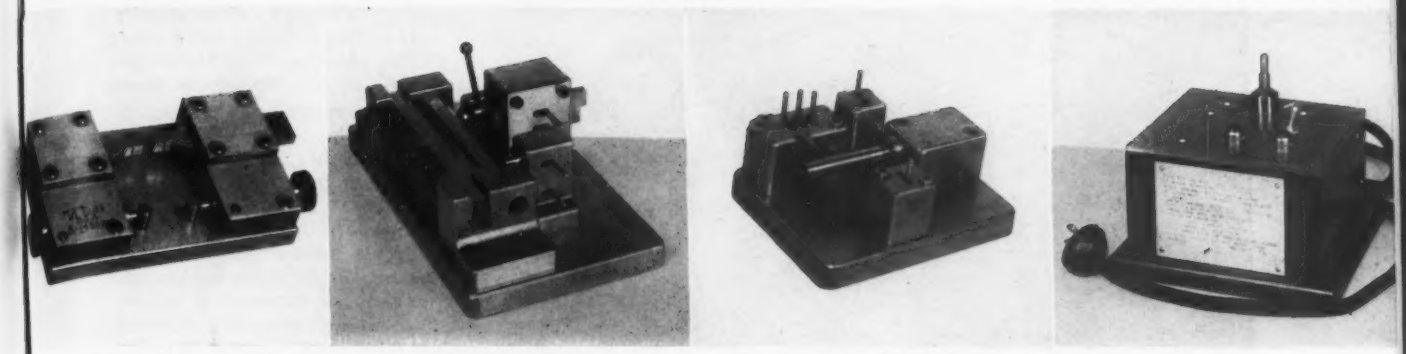
In effect he would be saying that World War II would have been lost had it not been for the Special Tool and Die Industry of this country, which produced the small, but absolutely essential tools, dies, jigs, fixtures and gauges necessary to enable the large mass production industries to turn out enough war goods—in time—to avoid defeat and ultimately to bring victory.

Any industry so all-important to the security of this nation needs to be understood, lest, by chance, some combination of circumstances so weakens it in peacetime that it no longer can perform in a time of national emergency. Nor does the great value of this industry cease at the end of war. It is also highly essential to efficient peacetime production even though it was born out of the urgent requirements of World War I, nurtured during the peace from 1919 to 1941, and truly "come of age" by accomplishing the "impossible" in World War II.

* With apologies to Ben Franklin

Necessity Builds Foundation for Tool Industry

In a very real sense, the Small Tool and Die Industry is as American as apple pie and baked beans. The individual initiative, inventiveness, perseverance and mechanical ingenuity which made the soil fertile for the birth of the industry was an outgrowth of the colonial period in New England. When a tool, however simple, was broken or out of order in those early days, there was no place to go to have a new one made or to have the old one repaired. Under such circumstances many men developed their latent mechanical talents to repair their own tools and guns and even to make and repair them for their less ingenious neighbors. From among the mechanically apt came the village blacksmith. His sons or apprentices were stimulated to inventiveness, first of a product, then of a machine and the necessary tools and fixtures to make the machine usable in the production of the finished product.



SPECIAL GAUGES OF THE TYPE SHOWN ABOVE ARE PRODUCED BY THE TOOL AND DIE INDUSTRY IN CONNECTICUT.

Watt had an idea for a steam engine, but an English iron master and some builders of French lathes had to build the machines to make it a reality. Slater, who developed the first practical textile machinery in this country needed the help of Windsor, Vermont, mechanics to build it. Eli Whitney had an idea for building guns with parts that were interchangeable, but when he looked around to find adequate machinery, dies, jigs, fixtures and gauges to produce those parts, he found it necessary first to develop and build the machines and other necessary small tools, gauges and fixtures before the gun parts could be made. He did the job and won a large U. S. Government contract for the first assembled, rather than tailor-made muskets, normally produced by an extremely slow and costly process. More important than that he set the first crude pattern for mass production, which, by subsequent refinement, has developed our modern material civilization.

Next came Samuel Colt, an imaginative young man from Hartford, with a flare for the dramatic. During an adventurous sea voyage, he whittled out a model of a six shooter revolver, but couldn't produce it. Eli Whitney made it for him while young Colt staged laughing gas demonstrations on street corners to pay him until sales defrayed expenses and built up profits to permit the building of the once famous Colt's Armory in Hartford. No existing machines were then considered of high enough quality to be installed there. So a young mechanical genius, Edward K. Root of Farmington, designed and had built the 1,400 special machines for Colt's Armory, which attracted the attention of every foreign government.

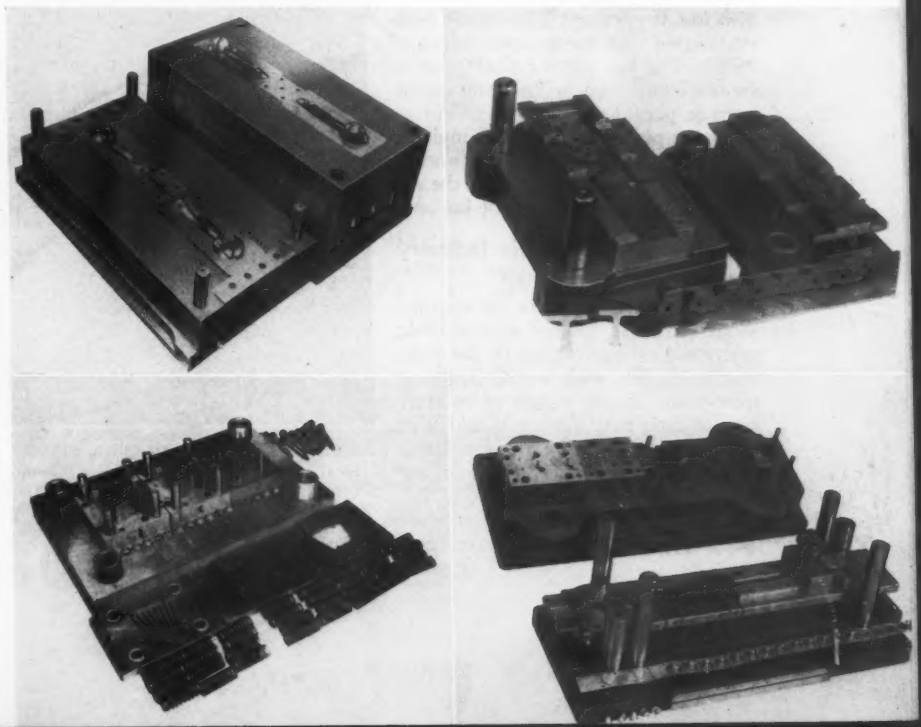
Then, out of the excellent stimulus of training received at Colt's, came James Pratt and Amos Whitney, who started the Pratt & Whitney plant to build machine tools. From there several workmen with mechanical ideas and dreams left the company's employ to plant branches of the machine tool industry in the midwestern states, chiefly in Ohio and Wisconsin.

The skein of inventiveness and ambition to accomplish something a little different, or merely to be the "captain of his own ship" while trying to develop financial security, was spread over the nation and eventually over most of the world by drawing each new mechanical adventurer into a new field. Together their collective accomplishments gave refinement to Whitney's crude mass production idea until it was capable of thwarting tyranny in two world wars, and giving man his greatest abundance of material gadgets.

In the light of these developments under our republican form of government, it is little wonder that good mechanics with all-round training in tool making and in production techniques frequently leave the larger mass production industries to start their own small shops, where they specialize in the making of special tools, dies, jigs, fixtures or gauges, or build and market some brainchild of their own in the form of a special item of value to other industries. For a number of years these small off-shoots of mechanical skill from the larger plants were sometimes referred to disparagingly as back-alley shops, but more generally as contract tool and die shops.

Before World War I demonstrated beyond question the need for a Special Tool and Die industry capable of producing practically any type of non-standard tools, the smaller shops were forced to accept practically any type of

A VARIETY OF METAL AND PLASTIC STAMPING DIES produced by Connecticut's tool and die shops.



OFFICERS OF THE SOUTHERN CONNECTICUT Tool and Die Association, (front row, left to right) George C. Johnson, Johnson Mfg. Co., Bridgeport; Eric L. Haffling, E. V. Haffling Co., Bridgeport; J. Clifford Meaney, Conn. Tool & Engineering Co., Bridgeport. (Back row, left to right) Joseph Horvath, Plastic Mold Die & Tool Co., Bridgeport; Richard F. Moore, Moore Special Tool Co., Bridgeport; William A. Johnson, Moore Special Tool Co., Bridgeport.

contract machine work their equipment would accommodate. The majority of the tool work was then produced in the tool rooms of the larger manufacturing plants. Wars, despite their terrible toll of life and property, do change many things and the methods of performing work. For example, aviation, as an industry, was launched in World War I, but never really grew up to become a real factor recognized by everyone as a powerful force in world affairs until it won its laurels in World War II. Much the same situation prevailed in the Special Tool and Die Industry, except it has never been dramatized like the aviation industry. Nor can it be, for it's final product cannot conjure up in the mind of the average person thoughts of adventure in far-off places such as are stimulated by a transcontinental or trans-ocean airliner swooping down out of the sky or soaring away into the blue horizon.

The Special Tool & Die Industry "Comes of Age"

Between the two wars the contract shops had their ups and downs as do practically all newcomers in the business field. But with a still lingering recollection in the minds of military men of their need during World War I, these shops were rapidly enlisted in the gigantic war effort after the start of World War II in Europe. Although the small special tool or contract shops had gained some recognition during the latter part of World War I and during the defense period preceding our entry into the war, collectively they had not been given formal recognition as an industry until the organization of the National Tool and Die Manufacturers Association in 1944, with headquarters in Cleveland, Ohio. This trade association, with chapters in Hartford and Bridgeport, Conn., has for its objective the promotion, general development and improvement of the tool and die industry. In fact, its first president was Richard F. Moore, president of the Moore Special Tool Co., Inc., Bridgeport, Conn.

Since its organization, under the able leadership of George S. Eaton, executive secretary, and an able group of directors from the leading tool producing areas of the country, it has devoted its efforts to: Research for better business methods; legislative efforts, especially to secure a fairer base for taxation; advancement of apprenticeship training; promotion of better industrial and public relations; adoption and promotion among its members of a code of ethics; and the development of informational services of all types to keep members informed of new methods and current developments.

The National Tool and Die Association sets forth the following ten fundamental truths as practical guides for the conduct of the tool and die business. They are:

1. The foundation of business is confidence, based on integrity, fair dealing, efficient service and mutual benefit.

2. The reward of business for good service rendered is a fair profit.

3. Equitable consideration and treatment are due customers, employees, management, capital and the public at large.

4. Knowledge, thorough and specific, is essential to lasting success and efficient service.

(Continued on page 32)

SOME MEMBERS OF THE EXECUTIVE COMMITTEE of the Central Connecticut Tool and Die Association. (Left to right) John H. Dowd, Johns-Hartford Tool Co., Hartford; Peter Zurles, Lake Mfg. Corp., New Britain; Francis W. Kelly, Lan-Kel Tool Co., Inc., Hartford; John N. Thornton, Thornton Mechanical Laboratories, New Britain; John D. Dewhurst, Arrow Tool Co., Inc., Hartford; Charles W. Neumann, The Argus Engineering Co.

Trained Hands

MATHEWSON
QUALITY PRODUCTS
MATHEWSON MACHINE WORKS · QUINCY, MASS.

Competent, skillful work in such a diversified business as ours can only result from years of experience. You cannot go out on the street and purchase on any market the coordinated abilities which you will find today in our large force of experienced engineers and craftsmen. For over 27 years the great majority of these men have been as a team, solving scores of industrial problems covering the unusually broad operating scope of designing, engineering, machining, fabrication and the manufacture of complete machines. These trained hands and minds are available to work with you on your industrial machining problems—simply call or write today—call Mathewson where you instantly have experience and quality work on your team.

Mathewson

Mathewson MACHINE WORKS, inc.
10 HANCOCK ST.
QUINCY 71, MASS.

FULLER RESEARCH

PRODUCES A BETTER MOP

Fuller research experts are constantly testing cotton yarns... testing them for tensile strength, both wet and dry, twist, absorbency, wear, shrinkage, and rate of absorption. Above is shown a section of the Fuller laboratory where the tensile strength of cotton yarn is tested. Only the best grades of cotton yarns can pass this test... just one of six they must pass before they're good enough to go into a Fuller Mop. For the best in industrial mopping, make sure you get a Fuller Industrial Cotton Wet Mop.

TELEPHONE your Local Fuller Branch Office or write

The FULLER BRUSH Co.

INDUSTRIAL DIVISION

3616 Main St. • Hartford 2, Conn.

In Canada: Fuller Brush Co., Ltd., Hamilton, Ont.

NEWS FORUM

This department includes a digest of news and comment about Connecticut Industry of interest to management and others desiring to follow industrial news and trends.

A STUDY ON DECENTRALIZATION IN INDUSTRY, recently completed by the National Industrial Conference Board, reveals that planned geographic dispersion of plants and decentralization of operation is taking place in a large segment of America's industry.

The study defines decentralization as the "geographic spreading out of a company's physical plant facilities," and points out that migration, or the transfer of a large part of an industry from one section of the country to another is not considered decentralization.

Approximately 28% of the 148 manufacturing companies surveyed were found to have a definite policy of decentralizing plant facilities. Over half of those companies reported that they are already decentralized. Many of them attribute their geographic dispersion to the acquisition of going companies or surplus war plants rather than to deliberate policy decisions.

Principal advantages claimed by companies with deliberate decentralization policies include: proximity to important new markets; tapping new sources of labor; greater efficiency in smaller plants; improved human and public relations; and the opportunity of segregating unlike operations in separate plants.

The geographic breakdown shows that in recent years the southern and western states have received a larger share of the new industrial plants than in the years prior to 1940. The north central states "held their own," while the northeastern states experienced a moderate decline.

FRED S. BACON

A. G. NEWTON, president of Rockbestos Products Corporation, New Haven, has announced the appointment of Fred S. Bacon, Jr. as assistant general sales manager.

He was formerly associated with Westinghouse Electric Corporation where he held the position of manager of the Central Station Division Department at Boston. He has been with Westinghouse since his graduation from Northeastern University in 1936.

★ ★ ★

RICHARD H. WHITEHEAD, former president and director of the New Haven Clock and Watch Company, has recently returned to his home in Guilford from Germany where he served the military government as a member of the staff of General Lucius D. Clay.

As a tribute to his government service, Mr. Whitehead has received an autographed photograph of the General with the following inscription:

"To Richard H. Whitehead—Whose contribution to the Panama Canal, to our war effort and to military government in Germany is a measure of a great citizen."

A graduate of Lewis Institute, Chicago, Mr. Whitehead is well known for his work in the engineering field. His early research and experimental work while employed as a testing engineer for the Commonwealth Edison Company led to his appointment as

The Cover

CORNFIELD in Portland at harvest time.

PAPERBOARD SINCE 1850 — FOLDING BOXES SINCE 1895

ROBERTSON·PAPER·BOX

COMPANY · INCORPORATED

MONTVILLE · CONNECTICUT

NEW YORK · 420 LEXINGTON AVENUE — BOSTON · PARK SQUARE BUILDING

THE IMPORTANT BALANCE SHEET FOOT-NOTE:

"Our 'Replacement Reserve' established by American Appraisal Service shows that plant values exceed book values by $....."

The AMERICAN APPRAISAL Company

Over Fifty Years of Service

OFFICES IN PRINCIPAL CITIES

COMPLETE!
PARTITION!!
SERVICE!!!

• • •

Martin-Parry
MOVABLE STEEL PARTITIONS
. . . for offices

Modernfold Door
. . . for business or home

Weisteel
. . . for toilet compartments

• • •

Phone Hartford 7-7214 for
INFORMATION
DEMONSTRATION • ESTIMATES

THE C. A. BADER CO.
229 BUCKINGHAM • HARTFORD

testing engineer in the construction of the Panama Canal. From 1914 to 1915 he was in full charge of all work on the Pacific Locks.

★ ★ ★

JACOB BALGLEY, for many years an executive of G. F. Heublein & Bro., Inc., Hartford, died recently while vacationing in Maine.

Mr. Balgley joined the Hartford firm in 1905 as office manager, became its secretary about 1912, secretary-treasurer in 1918, and executive vice president in 1920. He retired from the latter post early this year, and served the company as a director until his death.

★ ★ ★

A NEW WESTERN HEADQUARTERS of International Silver Company, Meriden, has recently been opened in the Knickerbocker Building, Los Angeles. President Evarts C. Stevens has revealed that the move to larger quarters was necessitated by soaring business on the Pacific Coast. The company's former western headquarters was located in San Francisco.

★ ★ ★

IN WINDSOR, CONNECTICUT, the new modern factory building of The Hartford Machine Screw Company, is now in full operation. The new facilities, in Windsor's Deerfield section, contain approximately 275,000 square feet.

According to President James A. Taylor, considerable planning went into the materials handling phase of the firm's operations with the result that those facilities equal any in a comparable line of business. A railroad siding has been provided, as well as adequate space for shipping and receiving, a large parking lot, and room for expansion. The company employs about 850 workers.

★ ★ ★

THE ELECTION OF Richard S. Havourd as secretary of Colt's Manufacturing Company, Hartford, has been announced by President Graham H. Anthony. Mr. Havourd will succeed Einar Sather.

A graduate of Rensselaer Polytechnic Institute and Georgetown Law School, Mr. Havourd joined Colt's in 1936 as a patent attorney. He is a member of the Connecticut Patent Law Association and the Hartford County Bar Association.

★ ★ ★

JAMES D. BURNES was elected vice president and general manager of the Petroleum Heat and Power Company at a recent meeting of the company's board of directors.

Mr. Burnes, who joined the company in 1928, will be succeeded as treasurer of the firm by Thomas J. Cody, Petro's comptroller since early 1947.

★ ★ ★

REYNOLDS LONGFIELD, works manager of the MB Manufacturing Company, New Haven, was taken by death recently as the result of a heart attack.

THE ARCHITECT'S DRAWING of the new home of The Hartford Machine Screw Company, Windsor.

A native of Oxford, Maryland, Mr. Longfield attended Western Maryland College and Cornell University. He worked as a superintendent in Winchester Repeating Arms Co. before joining the MB Manufacturing Co.

★ ★ ★

THE SILEX COMPANY, Hartford, has announced the election of Louis S.

Chick as president, to succeed Frank E. Wolcott, who has been named chairman of the board.

Mr. Chick will serve as general manager in charge of operations, while Mr. Wolcott will devote his efforts to the company's sales activities.

Mr. Chick was graduated from Brown University in 1922, and was associated with Lever Brothers for 25 years. Since 1947 he has been sales promotion manager of the Grocery Division of Standard Brands.

★ ★ ★

BERNARD G. KRANOWITZ, executive vice president of the New Britain Chamber of Commerce, was recently elected president of the Northeastern Institute at Yale University. He succeeds Dr. James H. Greene of Pittsburgh, Pa., who had served three years.

The Institute annually provides a curriculum and refresher course at Yale University for commercial and trade association executives. This year's courses were attended by some 250 persons from the thirteen states of the northeastern division of the country from Maine to Delaware.

★ ★ ★

ROLAND H. CAMP, president and a director of the Platt Brothers Manufacturing Company, Waterbury, died at his home recently following a year's illness.

A native of Waterbury, Mr. Camp was graduated from Yale University and Harvard Law School. He was a director of the Patent Button Company, Waterbury,

★ ★ ★

ONE OF THE SIX ORIGINAL FOUNDERS of Peter Paul, Incorporated, Naugatuck, George Shamlian of Oakland, California, has been named president of the candy manufacturing firm. He succeeds Calvin K. Kazanjian, who died recently.

Other officers named include Harold J. Kazanjian, treasurer, to succeed the late Jacob Hagopian; John Tatigian, secretary, Dorothea B. Kazanjian, assistant secretary, and Guerin B. Carmody, member of the board of directors.

★ ★ ★

PIONEERS IN THE DESIGN, development and fabrication of demineralizers, for the transformation of tap water into mineral-free water, the Penfield Manufacturing Co., Inc., Meri-

"MOSCOW CALLING, Mr. Carter"

. . . and both ends of the conversation will be recorded . . . by SoundScriber!

Whether Moscow, U.S.S.R., or Moscow, Idaho . . . important telephone calls to or from *anywhere* may now be recorded on your SoundScriber . . . the electronic disc dictation equipment that leads the way in business communications; that records your letters, reports, instructions, telegrams and memos on unbreakable, lightweight discs that are *permanent* records. They're mailable, fileable and routable, too.

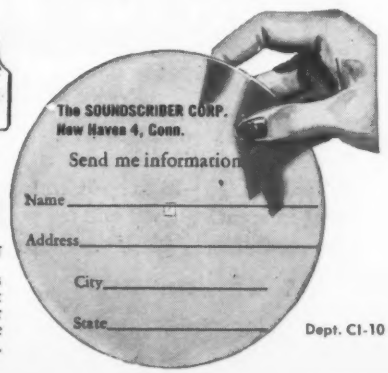
Now . . . no more scribbled notes or fleeting recollection of what has been said . . . of delivery promises, price commitments, shipping instructions, specifications or other obligations. No calling your secretary to listen in or take notes . . . no disturbing *her* busy program. For SoundScriber captures every detail . . . clearly and so distinctly that both voices are instantly recognizable. And SoundScriber automatic DISCopying makes *duplicate* "live-voice" copies as confirmation, right at your desk . . . only SoundScriber can accomplish this.

Mail the coupon, today, for the informative booklet "Let SoundScriber Remember" . . . all about the service of SoundScriber Telephone Recording in your business. Your local telephone company will be glad to furnish full details about connecting SoundScriber to your telephone.

SoundScriber discs hold up to 30 minutes of dictation—are easily indexed, routed, filed or mailed. Radio-clear quality insures accurate transcription. Low first cost, lower operating cost.

SOUNDSCRIBER
Trade Mark
ELECTRONIC DICTATING AND RECORDING EQUIPMENT

To find out how SoundScriber applies to *your* business, phone the nearest distributor, listed under "SoundScriber" in your classified telephone directory. Or mail the coupon.



Goes to the SOURCE of BAD SMELLS!

F & E DISINFECTS WHILE DEODORIZING

F & E kills many types of putrefactive bacteria—the source of disgusting odors. At the same time it transforms noxious vapors into a pleasant agreeable atmosphere tinged with the invigorating scent of eucalyptus.

USE F & E SOLUTION

around toilets and urinals . . . for flushing garbage receptacles and sick room accessories . . . for dressing room benches and lockers . . . wherever agreeable, high-speed deodorization is required.

Write for Folder FE-F745

The C. B. DOLGE CO.
WESTPORT, CONNECTICUT

den, has recently marketed a new low cost cartridge model unit with a production capacity of five to eight gallons of treated water an hour.

Penfield demineralizers are widely used for the production of chemically pure water for use in hospitals and the process industries—sugar refining, alcohol deproofing, metal-plating, and mirror-silvering. The new smaller unit was developed especially for automobile service stations for producing water safe for batteries and for photographers for development baths, especially for color films.

The unit consists of three parts: the removable cartridge, a cast aluminum wall bracket or holder, and an electronic conductivity meter which measures the quality of the treated water. The heart of the Penfield cartridge unit is the disposable cartridge, similar in principal to a flashlight battery.

The Meriden firm also produces large industrial models, for use by both industry and hospitals.

★ ★ ★

CERTIFICATES OF ACHIEVEMENT have been awarded to the Connecticut firms, The Seamless Rubber Company, New Haven, and The Acme Cotton Products Company, East Killingly, by the Surgeon General of the U. S. Navy.

The awards, in recognition of "meritorious and outstanding services rendered to the Medical Department of the Navy during World War II," were presented by Rear Admiral A. H. Dearing, U. S. Navy.

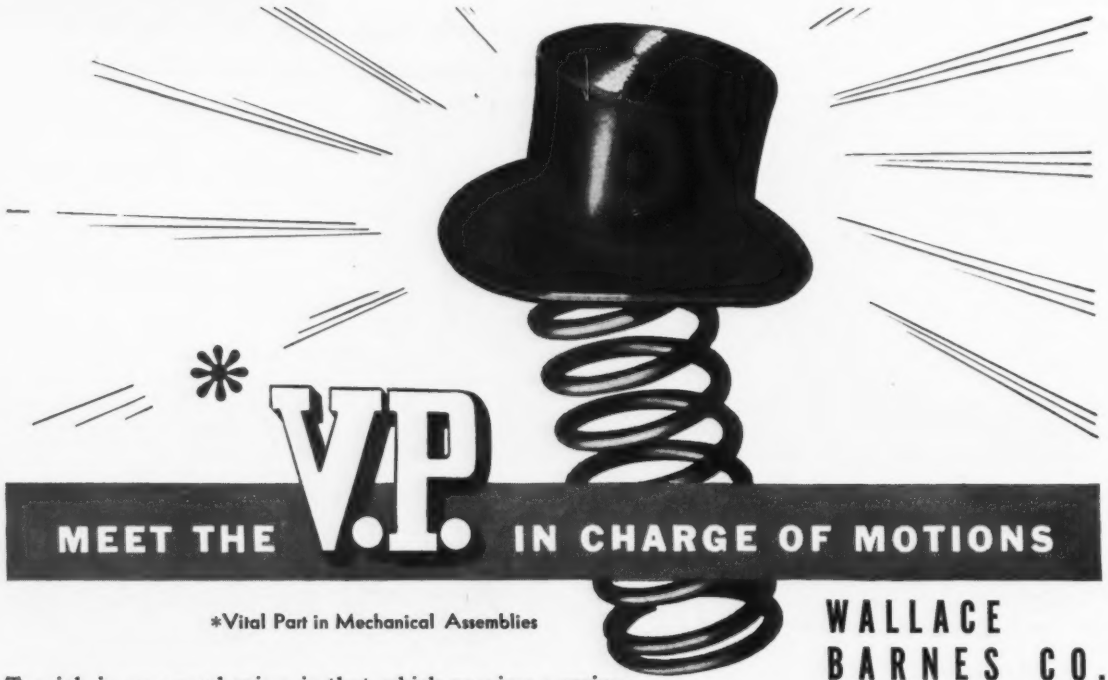
Wallace C. Hutton, vice president and treasurer of The Seamless Rubber Company accepted the award for that company, and President F. W. Buckman, of the Acme Cotton Products Company, received his firm's certificate.

★ ★ ★

NELSON RUPP, personnel manager of the Nash Engineering Company, South Norwalk, was taken by death suddenly as the result of a heart attack.

Before coming to Norwalk five years ago, he was associated with the John Morrell Meat Packing Company and the White Motor Company. He was a native of Marion, Ohio, and a graduate of Dennison University.

In Norwalk he took an active part in the city's civic activities. In 1945 he headed the Norwalk Chapter, American Red Cross. He also served



Top job in any mechanism is that which requires a spring—to make it go—to keep it running. Good springs are a great asset in creating good will for your product.

WALLACE BARNES CO.
DIVISION OF ASSOCIATED SPRING CORPORATION
BRISTOL, CONNECTICUT

as chairman of the general organization division of the Y. M. C. A.

★ ★ ★

THE ORGANIZATION OF THE SCIENTIFIC RESEARCH SOCIETY OF AMERICA at Yale University recently is an important step toward greater cooperation between the campus and the factory.

George A. Baitsell, Colgate Professor of Biology at Yale, has revealed that the founding of the society has been heralded by scientists as one of the most significant movements to arise in American science in many years.

Through the society it is expected that the barriers which have separated the flow of information between the various scientific disciplines will be lifted.

★ ★ ★

THE ANNUAL REPORTS OF TWO STAMFORD FIRMS were judged as highest in merit in their fields in the eighth annual survey of annual reports conducted by the magazine, *Financial World*.

The Norma-Hoffmann Bearing Corporation report for 1947 was judged as highest in the metal products field, and the report of Pitney-Bowes, Inc. was judged best in the office equipment category.

A total of 2,000 reports were judged and rated on the basis of editorial and statistical content, format, illustrations and typography for a possible 100 points. Both Stamford firms rated 90 points, for a "highest merit award."

★ ★ ★

SEVERAL EXECUTIVE PERSONNEL CHANGES have been announced by the Plume & Atwood Manufacturing Co., Waterbury. Arthur D. Woodward has been retired as vice president of the firm and general manager of the Thomaston plant. He will continue as a member of the board of directors.

James F. Curtis, former plant superintendent of the New Bedford mill of the Revere Brass & Copper Company has been named superintendent of the Thomaston plant. Frank B. Keeler, who has been associated with the Bridgeport Rolling Mills has accepted a sales executive position at Thomaston.

In Waterbury, Ernest C. Britton, former chief sales engineer of Veeder-Root, Inc., has become sales engineer. and Paul R. Curtis, formerly assistant

THE HENRY SOUTHER ENGINEERING CO.

Engineering & Chemical Service

Water Purification
Industrial Waste Disposal

Research Facilities for Industry

Hartford, Conn.

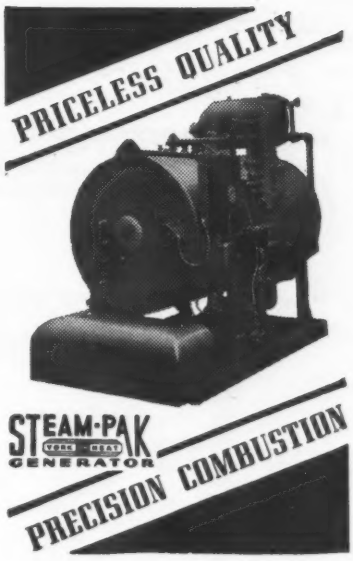
Photostats
•
Drafting Supplies
•
Blueprints

Joseph Merritt & Co.
166 Pearl Street Hartford
Tel. 2-9498

PACKING
for your . . .
ARMY-NAVY
CONTRACTS
in accordance with
Government Specifications

COMMERCIAL
EXPORT & DOMESTIC
Packaging, Packing, Shipping

THE MERCER & STEWART CO.
14 Sigourney St.
Hartford 5, Conn.



COMPLETE BOILER PLANT IN ONE PACKAGE . . .

Ready to slide into your plant, the Steam-Pak Generator provides boiler, oil burner and accessories including automatic controls all York-Shipley engineered, to give you greater operating efficiency and economy. If you need an automatic boiler plant for high or low pressure steam or hot water, the Steam-Pak Generator is the answer.

Distributed by

NORTHERN HEATING SUPPLIES, INC.

P. O. Box 26,
West Hartford (10), Conn.

Telephone 2-0404

Rated Tops
FOR EFFICIENCY AND ECONOMY

GENERAL ELECTRIC
Water Coolers

Rated Tops
FOR SERVICE AND DEPENDABILITY

THOMPSON
WATER COOLER CO.

Authorized
DISTRIBUTORS
Water Coolers

New Haven
7-0115
●
Hartford
2-1789
●
Waterbury
4-3319
●
Bridgeport
3-5757

ASK ABOUT OUR
RENTAL-EQUITY PLAN

sales manager of the Silex Co., Hartford, has asumed the duties of general sales manager.

★ ★ ★

THE MAN WHO HELPED TO BUILD the world's largest brass fabricating corporation, The American Brass Co., died recently at his Waterbury home. John A. Coe, Sr., for many years ABC's board chairman, will long be remembered as a significant force in the industrial and civic life of Waterbury and the Naugatuck Valley for more than 60 years.

His industrial career started in 1885 as an office boy in the firm Osborne & Cheeseman Co., Ansonia. His desire to learn the machinist trade led to his employment as an apprentice with Guild & Harrison Co., Brooklyn, New York.

He returned to Connecticut in 1892 as assistant superintendent of the Birmingham Brass Co., Shelton. In 1903 that firm was acquired by the newly-formed American Brass Co., under the leadership of Charles F. Brooker. He subsequently was appointed assistant to the president, and eventually became sales manager of the expanding organization. By then the American Brass Company had absorbed the Coe Brass Company, Torrington, the Waterbury Brass Company and Ansonia Brass & Copper Co. Benedict & Burnham Co. joined the merger in 1900 and the next year Holmes, Booth & Hayden of Waterbury entered the corporation.

Mr. Coe became vice president of the company and on February 3, 1920, succeeded Mr. Brooker as president. He was head of the concern when Anaconda Copper Mining Co. purchased ABC in 1922 in one of the major corporate transactions of the 1920's. He was elected chairman of the board in 1941 and retired from that position three years ago.

His numerous outside business and industrial activities included the presidency and a directorship of the Waterbury Savings; the Hendey Machine Co., Torrington; and the Ansonia Land & Water Co., Ansonia.

He is survived by Mrs. Coe, two children, four grandchildren and a great grandchild.

★ ★ ★

THE TRANSFER OF John J. Curry, resident manager of the Meriden plant, New Departure Division, General Motors Corporation, to that of resident manager of the division's Sandusky,

NOW Avery & Saul gives you

SPEED & ECONOMY
in
STAINLESS STEEL PLATE FABRICATION

↑ Paper mill vat fabricated of ¼" stainless steel plate by Avery and Saul. ↑

Providing, as always, the ultimate in steel plate fabrication, Avery and Saul announces the use of new "Flux-Injection Cutting" equipment for fabricating and welding stainless steel plate.

For industrial users requiring non-corrosive steel units, this new A & S fabricating process makes it possible to deliver superbly satisfactory results with the same speed and economy as with mild steel.

Whatever your steel plate fabricating need, Avery and Saul engineers are at your service for assistance in design and procedure. Consultation is invited.

Avery and Saul Co.
297 DORCHESTER AVE., SOUTH BOSTON 27, MASS.

Ohio, plant, and the promotion of William T. Murden, assistant sales manager, as Mr. Curry's successor in Meriden was announced recently by Milton L. Gearing, the division's general manager.

Lester A. Lanning, who has been serving as resident manager at Sandusky, has returned to Bristol where he has been assigned to the staff of George A. Smith, general manufacturing manager.

★ ★ ★

OFFICIALS OF VEEDER-ROOT, INC., Hartford, have announced the resignation of Charles G. Allyn, treasurer, assistant secretary and a director of the corporation.

Mr. Allyn joined the old Veeder Manufacturing Company in 1905. He was elected treasurer and director in 1932.

To succeed Mr. Allyn, Charles F. Pendlebury was named treasurer and Andrew J. Rebman was elected assistant secretary.

★ ★ ★

J. GROVER MIDDLETOWN, export manager and assistant secretary of the Capewell Manufacturing Company, died recently at the Hartford Hospital.

He had been associated with Capewell for more than 30 years. He was a member of the Export Managers Club of New York and the export committee of the Manufacturers Association of Connecticut.

A PROBLEM CONFRONTING MANY MANUFACTURERS of heavy goods is to arrange demonstrations of their products for prospective buyers. One enterprising motor manufacturer has solved the problems with a fleet of Pontiac demonstration station wagons loaded with actual motors, some of which can actually operated.

The company, U. S. Electrical Motors, Inc., with plants in Milford, Connecticut and Los Angeles, California, will schedule tours of these station wagons to the most remote locations where plants use electrical motors so that plant superintendents, foremen, machine operators and other men "on the firing line" who actually generate the demand for new electric motors can view an exhibition of the latest types.

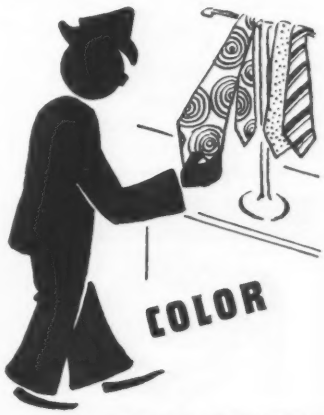
Each car is operated by an experienced sales engineer capable of giving prospects full technical details and qualified to make surveys of factory needs for the special types of U. S. Motors manufactured for variable speed, geared reductions and hazardous atmospheres.

The cars are stocked with a minimum of five types of motors. A sliding panel board was designed so that the motors can be moved out of the station wagon into the open for inspection and observation under operation.

★ ★ ★

THE RESIGNATION OF H. BLAKE FUESSENICH as vice president and manager of the Torrington division of the Connecticut Power Co., has been announced. Byron W. Roberts, superintendent of the local division since last December, will succeed Mr. Fuessenich, who will continue as a director of the company.

His resignation brings to a close an association of 45 years with the Connecticut Power Co. and its predecessor, the Torrington Electric Light Co.



SELLS THINGS

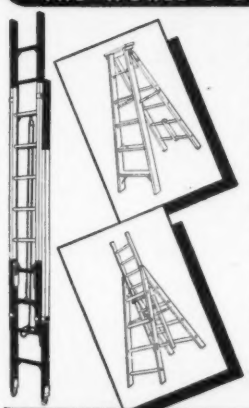
Color, properly used, certainly does help get attention and the lithographic process is particularly adaptable to the attractive use of color. If you have a difficult color matching problem, have a Kellogg and Bulkeley representative call and bring along the "Colorscope." It shows, in solid and and screen, hundreds of variations of the basic colors and tells how to make them. Our telephone number is 5-3157.

K & B

KELLOGG & BULKELEY
419 FRANKLIN AVE., HARTFORD 1
LITHOGRAPHIC DIVISION OF
CONNECTICUT PRINTERS, INCORPORATED

FLINT LADDERS

THE WORLD'S SAFEST · 65 YEARS OF LEADERSHIP



Many years of experience have given us knowledge and skill in the design and manufacture of ladders for industry. Every FLINT product carries a guarantee of skilled and conscientious workmanship.

LADDERS FOR ALL INDUSTRIAL PURPOSES—Extension, Single and Sectional Ladders; Safety Platform Ladders; Heavy Duty Step Ladders; Extension Trestles; Featherweight Stages; Scaffolds; Painters' Staging—including Blocks and Falls, Hooks, Saddles and Brackets.

There are many EXCLUSIVE FEATURES IN FLINT LADDERS, insuring added safety, easier handling and longer wear.

We also make special ladders for Contractors, Railroads and Light & Power Companies.

Write for our catalog—TELL US YOUR NEEDS.

THE WORLD'S FLINT Ladders SAFEST LADDERS

A. W. FLINT CO., 196 Chapel Street, NEW HAVEN, CONN.
"One of America's Oldest and Largest Ladder Makers"

STEEL CASTINGS

From an ounce to 1000 lbs. each.

Try us for fast delivery when your needs are urgent.

THE NUTMEG CRUCIBLE STEEL COMPANY

BRANFORD · CONNECTICUT

INFRARED fostoria SERVICE

INFRARED ENGINEERS

•

FOSTORIA INFRARED SERVICE, Inc.

•

1240 WHITNEY AVENUE
NEW HAVEN 14. CONN.
TELEPHONE 2-5985
BRIDGEPORT
9-4981

ARTHUR C. WHEELER, executive vice president of the Seymour Manufacturing Company, has been elected president of the company. He has been with the company since 1940.

Alton G. Wentworth was named executive vice president to succeed Mr. Wheeler. Other officers of the firm, a leader in the manufacture of nickel, silver and phosphor bronze, include: Bernard H. Matthies, vice president; Earl B. Boies, vice president; Harry A. Leigh, secretary and treasurer, and Charles Wohlfarth, assistant treasurer. Robert W. Brown is the newly appointed assistant secretary.

★ ★ ★

THE APPOINTMENT OF Warren L. Mottram of Wallingford as an alternate member of the State Board of Mediation and Arbitration has recently been announced by Governor James C. Shannon.

Mr. Mottram, director of industrial relations at R. Wallace and Sons Company, Wallingford, will succeed Arthur E. Allen of Lyme, who resigned recently, and will serve until April 16, 1951.

★ ★ ★

THE CONNECTICUT DEVELOPMENT COMMISSION, State Office Building, Hartford, has recently indicated a desire to receive from Connecticut manufacturers copies of industrial brochures prepared and distributed by other states. For some time the Commission has been making a collection of such out-of-state solicitations.

A recent survey, conducted among Connecticut manufacturers by the Commission, to determine the relative importance of location factors which should be considered, revealed that labor (supply and quality) ranked highest in importance. The other factors, shown in their decreasing importance are: transportation facilities; prevailing tax rates; nearness to sources of supply; personal reasons (good place to live); proximity to consumer markets; power facilities; laws (labor, zoning, business); availability of vacant plants; nearness to related industries; proximity to natural resources.

HOUSEKEEPERS FOR INDUSTRY

Waste Paper—All Grades

Rags—New Cloth Cuttings

Have you cleaned your plant of obsolete materials, correspondence and forms?

Let us do the job for you. We have the equipment and men to do it efficiently.

Most waste materials have a definite commercial value.

★

I. Hershman & Co., Inc.
New Haven **Phone 5-4177**

The A. C. Loveland Co.
Hartford **Phone 2-3145**

BOILER PLANTS — POWER PLANTS

INVESTIGATIONS — REPORTS — DESIGN — SUPERVISION

STEAM **ELECTRICITY**

PRODUCTION & DISTRIBUTION

WESTCOTT & MAPES, INC., NEW HAVEN

Wanted: A Reversal of Our Spend and Tax Philosophy

(Continued from page 7)

tunity of adding to their incomes if the extra production costs of working additional hours had not ruled out overtime.

Despite our many costly errors of the past, we can still go forward resolutely toward a greater future as a nation, better serving its citizens and other nations in the international family. Such a future, however, cannot be bought by a continuation of our present federal policy of "spend and spend and tax and tax" without restraint. It can only be assured by a determined effort on the part of a Federal Administration willing to reverse the present trend by fiscal reform and retrenchment which will permit lowering of taxes so desperately needed to stimulate greater lending of risk capital to job makers, greater legacies for better support of many of our best private educational institutions and larger savings for job holders. Let us cast our ballot in the forthcoming election for the candidates most likely to reverse the present trend. Let us help to bring about a great wave of economy in Washington and permit the savings to be applied to creative enterprise which will strengthen the nation to meet any emergency.

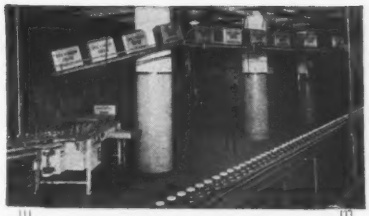
★ ★ ★

A COMPACTLY DESIGNED OIL-FIRED ENGINE HEATER for motor coaches has recently been developed by the Petroleum Heat and Power Company, Stamford, major manufacturer of domestic and industrial oil heating equipment.

The Petro engine heaters were perfected after extensive research and development and are a peacetime application of a heating device the company produced by the thousands for Army combat vehicles during the war.

Although the company believes there are varied potential uses for the engine heaters, initial sales concentration is being confined to the bus industry. When installed in busses the unit makes possible easy zero-weather engine starting and also aids lubrication processes so as to reduce the frequency of engine overhauls.

USHERING IN A NEW ERA in American communications, Lincoln Thompson, president of The SoundScriber Corporation, New Haven, recorded a telephone conversation with Senator Raymond E. Baldwin. The call was perhaps the first made under a new ruling by the Federal Communications Commission, permitting the use of recording devices in making records of telephone conversations. An intermittent tone signal, called a "beep," sounded on the telephone connection, indicating to Senator Baldwin (left) that Mr. Thompson (right) was recording the call. This is prescribed in the regulation of telephone recording by the F.C.C. It is expected that this new advance in American communications will find wide use in American government, business and industry to keep voice records of both sides of important telephone conversations.



INSTANTANEOUS

Local

SERVICE

on

Conveyors and Material Handling Equipment

by

"ISLAND"

the Unitized Spot Conveyor Specialists who have installed and assisted practically every type of industry throughout this country.

If you wish the latest in Material Handling Equipment investigate what the Island Engineers have to suggest, as they are the recognized Spot Conveying Specialists in this country

for the handling

of

PHARMACEUTICAL PREPARATIONS	to	ALARM CLOCKS
FOOD PRODUCTS	to	WAREHOUSING NEEDS
DAIRY PRODUCTS	to	BOTTLING WORKS
SMALL PARTS	to	LUMBER PRODUCTS
STEVEDORING	to	INSPECTING FACILITIES

Everything that can be done in moving

Put it up to us.

Phone: Donald Stiles, New Haven 2-5005

Island Equipment Corp.

Northside Rd., North Haven, Conn.

Main Office:

ISLAND EQUIPMENT CORP.

Brewster Rolls Royce Building

27-01 Bridge Plaza, North • Long Island City 1, New York

NEVER BEFORE have two colliers of the "Seam" class been at the dock of the T. A. D. Jones and Company, Inc. at the same time. The vessel on the left is the "Sewanee Seam" discharging a cargo of the finest New River coal for distribution throughout Connecticut. The vessel on the right is the "Sewell Seam" taking on Bunker "C" Fuel Oil from the tanks of the T. A. D. Jones and Company, Inc.

THE LARGEST IN THE WORLD and the most modern are these Seam vessels, having a cargo capacity of almost 12,000 net tons of coal.

AT NEW HAVEN, the T. A. D. Jones and Company, Inc., maintains the only commercial tidewater dock between Providence and New York equipped to handle these huge vessels.

T. A. D. JONES & COMPANY, INC.

NEW HAVEN • BRIDGEPORT

CONNECTICUT

A Centennial Chronicle

(Continued from page 10)

and the first rubber mills also date back to this period when the rubber industry was in its infancy. Many years later the Banbury mixer provided the industry with a means of producing uniformly mixed stocks of superior quality, with large savings in power; labor and other production costs. The Hale pelletizer was later developed to transform rubber into free-flowing pellets which can be transported on continuously moving conveyors and stored in space-saving overhead bins. These and other machines were designed specifically for the rubber industry. Later some of them were found suitable for, or were adapted to, use in other industries. For example, the Banbury mixer is today being used in the production of asphaltic materials, linoleum, paints, enamels and lacquers, and plastic materials of various kinds; and the Gordon plasticator, which was originally developed to break down rubber, is now also used for working plastics.

Farrel-Birmingham engineers have specialized in complete processing layouts which are composed of production units *matched in capacity* to prevent the "choking" or "starving" of succeeding machines. Production flows without costly interruptions and with manual aid and supervision reduced to a minimum.

The cane sugar industry, too, has come to rely on Farrel for design advancements. The reason for this is that the company has successfully served the sugar industry for over three-quarters of a century, and during this period has gained wide experience in the manufacture of cane sugar mill equipment.

OFFICERS AND DIRECTORS OF FARREL-BIRMINGHAM CO.: Left to right: Carl F. Schnuck; Armin G. Kessler, Vice President; Carl Hitchcock, Vice President; Fernley H. Banbury; Julius G. Day; Franklin R. Hoadley, President; A. Austin Cheney, Chairman; Austin Kuhns, Vice President; Franklin Farrel, 3rd, Secretary and Assistant Treasurer; Frederick M. Drew, Jr., Treasurer and Assistant Secretary; Franklin Farrel, Jr.; William A. Gordon; Lester D. Chirgwin, Vice President; and Joseph LeMay.

A recent study by Farrel engineers of existing installations in the West Indies, to determine how performance could be improved, resulted in the development of a new mill with many outstanding features which provide for more efficient and economical operation and increased juice extraction. Two of these new mills, which are among the largest in the world, are now in operation, one in Puerto Rico and the other in Mexico.

Metal rolling mills, which were among the earliest machines manufactured by the company, are today one of Farrel-Birmingham's major lines. Designed to fit the special requirements of a specific application, mills are built in a wide range of types and sizes for rolling non-ferrous rods, strips or sheets, metal foils and cold strip steel. The company also designs and manufactures the reduction gear drives and pinion stands, coilers and special handling equipment required to make each installation a complete production unit. Farrel-Birmingham roll grinders of the heavy-duty and traveling-table types are also widely used in metal rolling mills. They are designed to grind rolls of any material to any desired finish which can be obtained with wheels at present available.

Connecticut, the land of opportunity.

Since the days of the Yankee Pedlars, enterprising Connecticut people have been selling their wares the world over. Small manufacturers have become large manufacturers; and new manufacturing establishments have a way of springing up in Connecticut. They are small today; they are big tomorrow. We particularly like to help those little manufacturers become big manufacturers by bringing into their young and vigorous organizations our background of forty years of advertising service to Connecticut manufacturers sparked by our young and vigorous staff. Can we help you?

MANTERNACH, *Inc.*

172 HIGH STREET • HARTFORD, CONN.

IT'S **BARNEY'S**
OF HARTFORD

• For Executive and Office Furniture
• Shop Equipment

Free Delivery Anywhere in the State of Connecticut

•

Trade-Ins Accepted

•

A Representative Will Gladly Call Upon Request

BARNEY'S

450 FRONT ST. HARTFORD 5
CONNECTICUT · Phone 7-8129

Scientific Methods
ELIMINATE VOIDS AND POROSITY

GRAY IRON CASTINGS
Up to 5,000 Lbs.

HIGHEST QUALITY
IMMEDIATE DELIVERY

•

Production or Job Order Basis
Samples made Conditionally
No obligation for estimate

DECKER METALS INC.

Phone - Write - Wire
Thomas N. Scoville
Sales Engineer

Northampton, Mass. — 3950
Springfield, Mass. — 9-3838

80 SUMNER AVE.
SPRINGFIELD, MASS.

Farrel-Birmingham is one of the leading gear manufacturers in the country. At its Buffalo plant, which is devoted to the design and production of gears, gear units, gear generating machines and gear-type flexible couplings, there are seven of the largest gear generating machines in the world, plus numerous smaller ones, which are used to cut spur, single helical and Sykes continuous tooth herringbone gears, from "watch-fob" size up to twenty feet in diameter.

Here is made the world-famous Farrel-Sykes gear generator, which cuts continuous tooth herringbone gears without the center groove required by other machines for tool clearance. Originally designed in England, the greatest progress in the development of this machine occurred in the United States, after its inventor, the late William E. Sykes, became associated with Farrel in 1923.

This plant also produces Farrel marine reduction gear units, which played such an important part in the war. These units have a background of successful performance in over 1,200 ships of more than thirty different types, including submarines, destroyers, criusers and other naval vessels; tugs, tankers, freighters, ferries, dredges, etc. They are used with single and multiple Diesel engines, Diesel-electric and steam-turbine drives, and for power requirements ranging from 200 to over 30,000 shaft horsepower for each gear unit.

Personnel

The encouragement of employees to make a career of their connection with the company is an important contributing factor to the reputation of Farrel-Birmingham for highly developed engineering and mechanical skills.

The personnel program includes a long-established apprentice training course, special training of graduate engineers in Farrel-Birmingham engineering and production methods, and other employee educational activities; a well-defined policy of employee promotion; an organization of veteran employees with twenty-five or more years of service, known as the Old Timers' Club; and a company pension plan in which 95.1% of all eligible employees are at present enrolled.

The company provides, without cost to employees, a group insurance plan which includes life insurance, accident and health insurance and hospitalization. By paying a small premium, the hospitalization benefits can be extended to employees' dependents.

The company also underwrites a portion of the cost of all annual departmental outings and this year sponsored a Centennial outing for employees of all three plants.

Of the 2,200 present employees, 335 have served the company for more than twenty-five years, 171 others have records of over twenty years of service, and an additional 488 have worked for the company for at least ten years. Many are second and third generation Farrel-Birmingham workers. The president, Franklin R. Hoadley, has had a long association with the company, as did his father and grandfather before him.

The President, the four Vice-Presidents, the Treasurer and the Secretary of the company have a combined service record of 203 years; an average employment of twenty-nine years. Of the fourteen members of the Board of Directors, all but two are, or have been actively associated with the company in executive capacities.

Through all these years the Farrel family has maintained its interest in the business. Almon Farrel's son, Franklin, was President for forty-three years. His grandson, Franklin Farrel, Jr., who until recently was Chairman of the Board of Directors and of the Finance Committee, is still a member of the Board and of the Finance Committee. The latter's son, Franklin Farrel, 3rd, is Secretary, Assistant Treasurer, Assistant to the President, and a member of the Board. Three other officers of the company, Alton Austin Cheney, Chairman of the Board of Directors, Carl Hitchcock, Vice-President and General Sales Manager, and Frederick M. Drew, Jr. Treasurer and Assistant Secretary, are also descendants of the founder.

Industries Important Feature of Exposition

(Continued from page 11)

tors the major processes involved in the manufacture of sterling flatware and holloware. With many beautiful silver pieces arrayed about the exhibit, the artisans representing the art of the entire Connecticut silverware industry performed the successive operations of "spinning," "chasing," assembly or silversmithing and decorative engraving.

One operator was seen "spinning" raw silver into a shining disk by skill-

fully pressing it against a continuously turning wooden chuck, while another demonstrated the difficult process of "chasing" by delicately lifting the silver and laying it back into its various levels required for bas relief decoration. A third silversmith assembled the component parts of the silver items, first heating them to the correct temperature, and then joining them in their completed form. The final operation shown was that of an experienced engraver who adorned the article with cleverly etched designs.

Tiny precision parts for clocks, watches and automatic timers were machined by workmen from the E. Ingraham Company, Bristol, and the Lux Clock Manufacturing Company, Waterbury, in an exhibit representing the timepiece industry of the State and showing its contribution to the year-round economy of Connecticut. The centerpiece of the colorful display was an illuminated three-dimensional world globe, constructed in a clock design, flanked on both sides by display cases containing various types of clocks and watches and timers which the companies manufacture.

IT WAS DONE WITH MIRRORS at the R. Wallace & Sons Manufacturing Co. exhibit in the Connecticut building. Tilted mirrors behind the skilled craftsmen gave spectators a three-dimensional view of their intricate handicrafts, all processes colorfully explained by expert representatives of the company.

To either side of the center section were the machines in operation, each with an individual magnifying stand to show the tiny parts being turned out, and behind each machine were illuminated insets showing the number of employees working in the timepiece industry and the allied industries which contribute to the production of clocks and watches.

THIS COLORFUL EXHIBIT represented the entire timepiece industry of the state. Actual production operations were performed by skilled workers from The E. Ingraham Co., Bristol and the Lux Clock Mfg. Co., Waterbury.

Other "trans-lite" slides demonstrated the important developments made by the Connecticut timepiece industry to the progress of the industry as a whole and cleverly portrayed the many applications of Connecticut-made automatic timing devices. A lighted marquee, projecting over the center section of the exhibit, was emblazoned with the significant legend, "By Its Timepiece Connecticut Regulates the World."

The A. C. Gilbert Company of New Haven featured several items in its line of mechanical and educational toys which were displayed on a 16-foot table divided into two sections. One-half of the table was surmounted by a simulated terrain of a typical Connecticut industrial community criss-crossed by lines of railroad tracks, signal lights, "talking stations," and a ten-foot long (non-Connecticut) tunnel. On this miniature landscape American Flyer freight and passenger trains sped from station to water-tower, whistled at grade crossings, and, puffing real smoke disappeared into the tunnel.

Other products developed in the Gilbert Hall of Science were seen in

LIVE DEER, RED FOXES, brilliantly colored pheasants and salt water fish are features of the Fish and Game Department's exhibits, center rear, and the Department of Labor's interesting and educational display in the far rear.

QUIET

Through CELOTEX ACOUSTICAL PRODUCTS is now within the means of every business—large or small.

For complete information about how ACOUSTI-CELOTEX reduces noise, call

THE C. A. BADER CO.
229 Buckingham St.
Hartford

Telephone 7-7214

GENERAL STEEL PRODUCTS
LOCKERS
SHELVING
CABINETS
In Stock for
IMMEDIATE SHIPMENT

MOVABLE PARTITIONS
for
Offices, Shops, Cribs, Toilets

WORK BENCHES
SHOP STOOLS

EXPERIENCED ERECTORS FOR INSTALLATION OR REPAIRS

WARD MAIER & CO.
New Britain, Conn. - Milford, Conn.
Phone 3-0626 Phone 4-0997

Warehouse — Kensington, Conn.

CONTRACT MANUFACTURERS
- SPECIAL MACHINES
- MACHINE WORK
- SMALL STAMPINGS
- COMPLETE ASSEMBLIES
- SHEET METAL WORK
- BAKED ENAMEL FINISHES

YOUNGBERG BROS.
PHONE 1816
MERIDEN, CONN.

We specialize in . . .
GROUND THREADS
GROUND GEAR TEETH
GROUND SPLINES
GROUND CAMS
BROACHING

For full details write:
The Hartford Special Machinery Co.
Hartford, Conn.

Designers and Manufacturers
of Tools, Dies, Jigs, Fixtures and Gages
Jig Boring and Jig Grinding
Planing, Boring, Turning
Cincinnati, Lucas and Bullard Machines

We build Special Machinery and Parts
Welded Fabrications
We will do your Stampings and Spot Welding
Progressive — Swedging
Broaching — Drawing
Short Runs — Long Runs

THE
SWAN TOOL & MACHINE CO.
30 Bartholomew Avenue
HARTFORD 6, CONNECTICUT

action on the other half of the table. Walking robots with brightly flashing eyes, operated by remote control, glided through the replica of a tiny amusement park filled with parachute jumps, ferris wheels and soaring airplane rides. These and other Gilbert products added to the scene of bustling activity and the barely suppressed excitement of youngsters from six to 60 who now have decided, after viewing this September preview, what their Christmas stockings will hold, come December 25.

The aircraft industry of the State was strikingly represented by the United Aircraft Corporaiton, East Hartford, which set up an exhibit containing a 3,500 H.P. Wasp Major engine, the latest type turbojet engine, a typical installation of a Hamilton Standard propeller, and enlarged photographs of the military and commercial aircraft which are equipped by Connecticut aircraft plants.

Both the Wasp and the JT6 Turbojet engines were mounted to simulate actual flight and the outside shielding of the former was cut away to allow closer inspection by visitors while the latter gave spectators a clear picture of the potentialities of a new era in aviation. The hydromatic propeller was actuated by a device in the face of the installation stand and its blades revolved slowly and changed "pitch" continuously.

The twelve other Connecticut companies which displayed their products and machinery in the huge Industrial Arts Building at the Fair were: The Beaver Tractor Company, Inc., Stratford; the Brown Lightning Protection Company, Hartford; H. G. Davis, Inc., Bridgeport; The Fuller Brush Company, Hartford; Fyler, Inc., West Simsbury; Garden-All Tractor, Inc., Hampton; General Electric Company, Bridgeport; Kennel Food Supply Company, Fairfield; W. C. Mason & Company, Inc., Hartford; Mastercraft Trailers, Rocky Hill; Orkil Inc. (Clark Farm Equipment Division), Hartford; and the Yale & Towne Manufacturing Co., Stamford.

The six state departments which occupied other sections of the 7,800 square feet of display floor in the Connecticut Building, with exhibits of some of their state-wide activities and operations were Farms and Markets, Fish and Game, Highway, Labor, Motor Vehicles and State Police.

MORE STEEL COMING FOR DSC CUSTOMERS

New Detroit Steel Corp. New Haven Mill Progress from Jan. 1. to Oct. 1, 1948

Dependable Dan Our Customers' Man Invites Correspondence Regarding Your Normal and Regular Requirements

Frankly, we may be unable to accept new business now, but looking ahead, we would like to keep you informed about our expanding facilities.

Here's How We're Going to Have More Steel for You...

Now under construction . . . a big, new cold rolled strip mill in New Haven, Conn., scheduled to begin rolling by January 1, 1949 . . . to give Eastern customers 60,000 tons additional producing capacity . . . practically at their stockroom doors.

Improvements at our Detroit mill to step up that unit's producing capacity to 150,000 tons a year . . . to increase the supply of cold rolled strip available to Midwestern customers by about 35,000 tons a year.

And D. S. C. Reminds You . . . That our Detroit mill . . . our Reliance Division network and our Craine-Schrage Steel Division will continue to do everything possible to keep your production rolling . . . giving every account equitable consideration . . . constantly planning and working toward greater production and supply . . . and towards higher standards of steel service.

DETROIT STEEL CORPORATION

PRODUCERS OF
COLD ROLLED STRIP STEEL

DETROIT 9 MICHIGAN

RELIANCE STEEL DIVISION

PROCESSORS AND DISTRIBUTORS OF JOB-FITTED SHEET AND STRIP STEEL

General Office: 1025 South Oakwood Ave., Detroit 25, Mich.
Plants: Chicago, Cleveland, Detroit, Lyndhurst, N. J., Worcester, Mass.
Sales Offices: Grand Rapids, Indianapolis, New Haven, Philadelphia, St. Louis, Toledo
Products: SHEETS—Hot Rolled . . . Hot Rolled Pickled . . . Cold Rolled . . . Long Terne . . . Galvanized; PLATES; COLD ROLLED STRIP STEEL—Coils and Cut Lengths . . . Slit or Round Edge . . . All Tempers.

★ ★

CRAINE-SCHRAGE STEEL DIVISION

DISTRIBUTORS AND DIRECT MILL REPRESENTATIVES

Warehouse and General Office: 8701 Epworth Blvd., Detroit 4, Mich.
Sales Offices: Grand Rapids, Toledo, Indianapolis
Products: Cold Drawn and Hot Rolled Carbon and Alloy Steel Bars . . . Tool Steels . . . Drill Rod . . . Wire Rope, etc.

For the Want of a Horseshoe Nail

(Continued from page 14)

5. Contracts and promises should be carried out in letter and in spirit.
6. Goods and services should be as represented.
7. Waste in any form of capital, labor or materials is intolerable.
8. Controversies should, where possible, be adjusted by voluntary agreement.
9. Unfair competition embraces all acts characterized by unfair practices.
10. Lawful cooperation among those in the industry in support of these principles of business conduct will make them a vital force.

The association also lists in its "code of ethics" ten unfair practices which it urges its members scrupulously to avoid. They are:

1. Knowingly making misrepresentations, or taking advantage of a customer's lack of information.
2. Giving quotations or guarantees of performance without full knowledge of costs and all elements affecting performance.
3. Refusing to discuss disputed matters in a spirit of friendly adjustment.
4. Giving money or anything of value with intent to bribe.
5. Failure to make a reasonable charge for design service or contract cancellation, or to make an unreasonable charge for such service or cancellation.
6. Use of confidential information regarding a competitor's proposal to his disadvantage.
7. Accepting without verification reports that reflect upon the honesty of intent or act of a competitor.
8. Wilfully discrediting the equipment, product, methods, personnel or credit standing of a competitor.
9. Enticing away the employees of competitors.
10. In times of manpower scracity, paying exorbitant and unreasonable wages or salaries. In other periods, not adequately compensating employees.

In the words of W. R. White, Jr., vice president of the Midwestern Tool Company of Chicago, Illinois, who coauthored a recently published brochure entitled, "The Tool and Die Industry Comes of Age," "The Special Tool and Die Industry, starting as an unknown industry, has steadily grown in size and importance until today it is recognized by the industrial leaders of this country as the 'cornerstone of American industry' . . . the extent to which the machine tool industry has contributed to our nation's industrial pre-eminence is a matter of history. The progress of the machine tool is so definitely tied in with the progressively higher standards of manufacturing efficiency, that it is easily recognized as a pillar of our economic system.

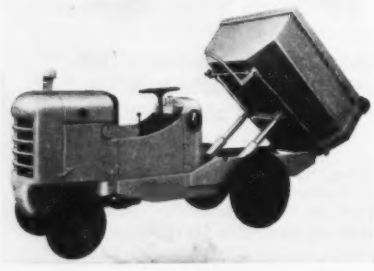
"The base upon which that pillar sets is the Special Tool and Die Industry. It is not generally known or realized that a $2,500 machine tool is rendered useless by the absence of a $25 milling cutter. In fact, machine tools themselves cannot be made without tools, dies, fixtures and gauges—all products of the Special Tool and Die Industry. So it is, that this industry, with its comparatively insignificant volume of sales, is the foundation upon which the entire manufacturing system of the country operates."

Despite the lack of understanding by the average user or beneficiary of American peacetime or wartime products, the fact remains that without the

Hough Payloaders

The Answer To your Material Handling Problems

AN OUTSTANDING TEAM



The Model HA Payloader was conceived and designed to do a wide variety of bulk materials handling jobs faster, cheaper and better than any other method. Thousands of these machines are now in use . . . have rolled up millions of hours of work experience . . . saving money, saving manhours of hard labor, speeding output and cutting production costs in a variety of industries.

The Hough Payloader Buggy was built to provide low cost, high production capacity over longer hauls than are practical with any type of tractor shovel or loader. Built as a companion to the famous Payloader Shovel, the Payloader Buggy is balanced to match it in capacity, size, speeds and operation, and in addition provides the service economy of almost completely interchangeable parts.

Tyler Equipment Corporation **251 Shaker Rd. East Longmeadow, Mass. East Longmeadow 376**

tooling genius of the resourceful men in the tool and die industry, the manufacture of the overwhelming majority of end products would be impossible.

There are many examples in proof of the stellar accomplishments of the men who own and operate somewhere in the neighborhood of 3,000 to 4,000 special tool and die shops in this country, each employing on the average of from six to 40 highly skilled mechanics and designers. Let us consider the importance of the following example.

During the North African campaign, the forces of Marshal Erwin Rommel were steadily beating the Allies back toward the Suez Canal, the vital supply route which the Allies wished to protect at all costs. The reason for the success of the German Afrika Corps was the use of a tail fuse, which drove the shells through tanks or other defenses before exploding. The nose fuse shell, used by the Allies, would not drive a shell through a tank, but rather flattened out on contact with a heavily armored object.

In desperation our military leaders put through change orders to revise the M 66 shell. The Tool and Die Industry was given the job of designing and manufacturing the necessary tools for the change-over. The job was done with the utmost speed and efficiency. Soon thereafter Marshal Rommel was stopped and eventually pushed out of Africa, thus shortening the war by many years.

The industry literally performed miracles with out-of-date machinery in old antiquated shops, garages and basements by speeding the tooling jobs for the production of aircraft, tanks and fire control equipment desperately needed by both the Army and Navy, days, and sometimes weeks before subcontracts could be made by the mass production industries with the tools and die shops.

Peculiarities and Peacetime Problems

Since the Tool and Die Industry compares with the tailor who makes clothes to order for each customer, rather than enjoying the economies of the mass producer with repetitive operations, it encounters a high degree of risk in its operations. Each new tool, die, mold, gauge, jig or fixture either must be designed to perform a specific operation under a given set of conditions and made from the right type of metal to give satisfactory performance, or it must be produced in accordance with customers' specifications. The tool and die shop is usually blamed for poor performance of the tool regardless of whether it was designed by one of the shop's employees or by the customer. It may be poor design or workmanship in the tool shop, or it may be the fault of the customer's specifications. The fact remains that the tool shop is always on "the spot" regardless of whether the blame for poor performance of his product is entirely his fault or not.

Other factors contributing to the high degree of risk and the difficulty of bidding on jobs are: (1) the great risk of scrap when working to exceedingly close tolerances; (2) the almost undeterminable length of time required for a workman to process material to a given dimension; (3) the difficulty of obtaining and keeping on the payroll the men with the necessary skills; (4) the small quantities produced from each item; (5) the broad knowledge required by the administrative men (usually owners) of tool and die shops as compared to the knowledge required by "specialists" in the larger mass production industries.

The Government's urge to expand rapidly at the beginning of World War II, after a long depressed period, put an unusual strain upon the managements of tool and die shops in the matter of training adequate manpower and acquiring the necessary tools.

Apprenticeship, upon which the tool and die industry depends to fill its manpower ranks, was totally lacking during the depression of the thirties when the industry was unable to keep its skilled help on full-time sched-

(Continued on page 41)

Manufacturers of

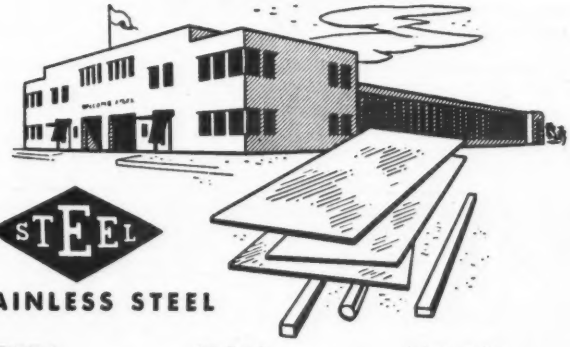
FIRE BRICK

IN ANY SHAPE
OR QUALITY DESIRED

THE
HOWARD COMPANY

250 BOULEVARD
NEW HAVEN, CONN.
TEL. 7-2040

EDGCOMB
STEEL



STEEL

STAINLESS STEEL

SHEETS • STRIP • PLATES
BARS • TUBE • PIPE

Brass and Bronze Rods • Cold Finished Steel Bars • Cold Rolled Flat Wire • Spring Steel • Perforated Metal • Strip Steel • Drill Rod • Specialties • Sheets — Cold Rolled — Pickled and Oiled

Available for Immediate Shipment . . . from Complete Warehouse Stocks

EDGCOMB STEEL *of New England Inc.*
MILFORD, CONNECTICUT

BUSINESS PATTERN

A comprehensive summary of the ups and downs of industrial activity in Connecticut for the thirty day period ending on the 15th day of the second previous month.

THE July index of general business activity in Connecticut was estimated at 37% above normal, which represents a decline of five percentage points from the preceding month and one point from the standing of a year ago. The principal reasons for this fall off in the general index were a substantial decrease in the number of manhours worked in Connecticut factories and a sharp drop in cotton mill activity. There were no significant changes in the other components, as employment declined slightly, while freight shipments and construction registered small advances. The United States index of industrial activity dropped one point in July to 36% above normal. As a result of these changes, the State and National indices are now within one point of each other for the first time in more than two years. Throughout this period the Connecticut index has been at least four points, and has averaged fourteen points, above the United States index.

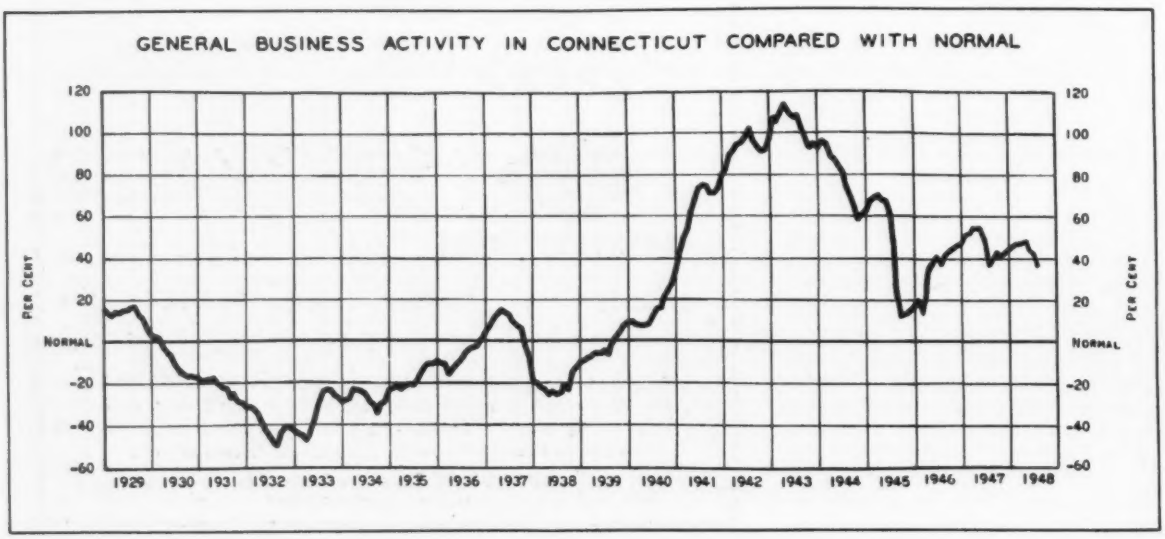
The index of manhours worked in Connecticut factories fell off fourteen points during July to an estimated 43% above normal. This sharp decline was brought about through the growing practice of many of the State's industrial concerns of closing for a one or two week vacation period. This was particularly noticeable in Hartford County where the Manufacturers Association reported manhour reductions of 18% in New Britain, 17% in Bristol, and 12% in Hartford. Although the shutdowns usually occur in July, this year several companies, including Remington Arms and General Electric in Bridgeport, scheduled two-week vacation closings in August.

In July the index of manufacturing employment declined one point to an estimated 42% above normal. There has been a slight downward trend in manufacturing employment since the first of the year with the index losing three percentage points during that period. Since the middle of 1946, when full peacetime production got under way, the employment index has moved within a ten point range between 37 and 47 per cent above normal. The gradual decline in employment along with some vacation layoffs and a large number of students home from school has caused a noticeable increase in unemployment. The State Department of Labor placed the number of persons unemployed in mid-July at 41,500, the highest figure in the past two years.

The index of freight shipments originating in eight Connecticut cities rose five points in July to 24% above normal. Whereas tonnage from seven locations was somewhat less than in the preceding month because of factory vacations, larger than usual shipments from one point were sufficient to produce an over-all increase. Throughout the first seven months of this year, total tonnage shipped from all eight locations was about 14% less than the amount forwarded during the same period of 1947. Loadings of revenue freight for the country as a whole were approximately the same as last year.

The July index of construction activity in Connecticut moved up one point returning to the May level of 31% above normal. In the three years since the end of the war building contracts awarded have averaged 1,700,000 square feet of floor space per month, with residential accounting for 60% of this total. This is greater than the highest three-year war period, March 1940 through February 1943, when total contracts averaged 1,500,000 square feet of which 67% was residential. This high volume of construction activity is continuing at the present time as evidenced by the fact that for seven months this year total awards have averaged 1,450,000 square feet with July volume esti-

(Continued on page 41)



TRANSPORTATION

ERWIN H. TUTHILL

Traffic and Export Manager

IN view of the many recent requests for assistance in securing payment of long overdue loss and damage claims, it is apparent that many companies are not familiar with the proper procedure. It would therefore appear advisable to outline briefly the requirements that should be followed by the claimee as well as the various avenues of approach that are available to secure payment. Since most of the difficulties appear to be in relations with motor carriers, we shall deal exclusively with that mode of transportation. However, the statute is identical with that in effect for rail transportation.

The Interstate Commerce Act is very specific in outlining the liability of the motor carrier for all loss and damage to goods while in his possession. Where the route of movement involves two or more motor carriers, the liability falls on both the originating and delivering line. In other words, the claim may be filed against either and payment must be made regardless of where the loss or damage occurred. Notwithstanding these specific provisions covering the liability of the carriers, there are certain procedures which must be followed by the claimee.

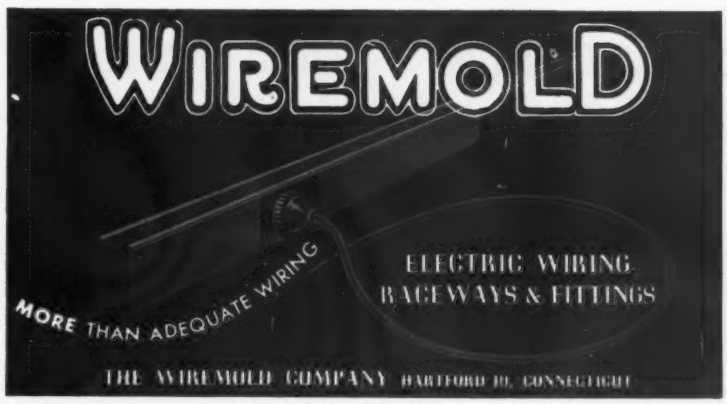
First and most important is that a claim must be filed. Notice of claim or intent to file claim, written or verbal, will not suffice. There are standard claim forms approved by the Interstate Commerce Commission and the various motor carrier associations. However, it is not essential that they be used. A claim may take the form of a letter but if this method is used, extreme care should be taken to specifically request damages in the amount involved. To the claim should be attached the signed original bill of lading, if in your possession, the receipted freight bill and a certified copy of the invoice showing the value of the shipment. The claim itself must be filed within nine months of the date that the action accrued, i.e., date of actual delivery at destination or in the case of total loss, the date that the shipment might reasonably have been expected to be delivered. There is no way of staying this nine-month statute of limitations without the filing of a bona fide claim.

It is advisable when filing claim to assign a number to it and be sure to follow up with the carrier promptly if acknowledgment of the receipt of the claim has not been received. In the event that carrier declines settlement of the claim, you have two years from the date of his letter of declination within which to sue. The Interstate Commerce Commission itself has no jurisdiction over loss and damage claims and therefore suit to recover damages must be handled in a court of law having jurisdiction within any state through which the carrier operates.

Assuming you have followed the above steps, if the carrier does not actually decline settlement but unduly procrastinates, there are two courses which may be followed in securing prompt settlement. All carriers handling interstate business, regardless of whether or not they themselves go out of the state, must carry insurance and a policy must be on file with the Interstate Commerce Commission in Washington together with a rider to that policy making the insurance company liable up to $1,000 for the contents of any one vehicle lost or damaged for which that carrier is liable regardless of any exceptions that may be listed in the original policy. A report to the insurance company of the carrier's failure to pay should in most instances result in prompt payment of the claim if it is in order.

The other method is with the assistance of the motor carriers generally. The American Trucking Association has set up a freight claim council within its membership subscribed to by 1,200 motor carriers, all of which have promised to process claims promptly. A report to this council, whether or not the carrier involved is a member, will bring its assistance in securing prompt payment of the claim.

Shippers in the Connecticut area that desire to use this latter approach should contact either the regional chairman, M. F. Wright, Moshassuck Transportation Company, Walker Street, Sayleville, R. I.; L. J. Gero, Hemingway Bros. Interstate Trucking Company, 438 Dartmouth Street, New Bedford, Mass., or N. R. Durant, Adley Express Company, 216 Crown Street, New Haven, Conn. In doing so the letters of complaint must contain the following information: (1) Complete name and address of the carrier, (2) your claim number and date filed, (3) carrier's claim number if receipt of claim acknowledged, (4) carrier's freight bill, number and date, (5) name and address of shipper, (6) name and address of consignee, (7) nature of claim, whether for shortage or damage. The Council also requests that you advise it immediately upon receipt of payment in full.



TAXATION

By DANIEL B. BADGER

Attorney

Gross Receipts Taxes on Interstate Sales

MANY Connecticut manufacturers or distributors would be surprised to learn that they are subject to the New York City General Business Tax if they make sales in any manner whatsoever to customers in New York City. This is because the average seller assumes that a tax of this kind must be conditioned on some local activity in the taxing jurisdiction, such as the maintenance of an office or stock of goods, acceptance of orders or passage of title in the city. Yet the New York City regulations under this tax law provide that "any out-of-state business not maintaining an office within the city of New York, which makes sales to persons within the city through a sales representative, an independent sales agency, a resident salesman, or in any other manner, is subject to the tax."

A law similar to the New York City General Business Tax has recently been adopted in Monroe County, N. Y., and the regulations prescribed under that law are almost identical with those of New York City. In view of the current trend on the part of counties and municipalities everywhere to adopt revenue measures supplementary to the General Property Tax, it would seem that the Connecticut manufacturer is faced with a mounting prospect of gross receipts taxes on his out-of-state sales by the place of destination.

In this situation the out-of-state business concern is faced with numerous problems. In the first place there is the constitutional issue of whether such a tax law and regulations are valid under the commerce clause. Back in 1940, the U. S. Supreme Court ruled that New York City could impose a sales tax upon sales made to customers in New York through a resident sales agent in the city, regardless of where acceptance of orders or passage of title occurred (McGoldrick vs. DuGrenier, 309 U. S. 70). The language of that decision gives strong support to the idea that either a sales or gross receipts type of tax may be imposed whenever the sale ultimately involves delivery of possession to the purchaser in the city. On the other hand, some subsequent decisions of the Supreme Court have cast some doubt on the scope of the 1940 decision. In one of these cases, the Court held that a state could not impose a sales tax upon a transaction in which the only local activity was solicitation of orders by a traveling salesman (McLeod vs. Dilworth, 322 U. S. 327). In another case, the Court, in holding invalid the application of the Indiana Gross Receipts Tax to interstate sales, suggested that there was an absolute prohibition against such application, and therefore cast doubt on the hitherto accepted principle that *apportionment* of the Gross Receipts Tax base would save it from invalidity (Freeman vs. Hewit).

In addition to these constitutional issues, which have not yet been resolved in the courts, there is another legal issue as to the validity of the regulations issued under the statute. The General Business Tax statutes in question purport to impose the tax upon the privilege of carrying on a trade, business or any other commercial activity in the jurisdiction. In legal parlance, the term "doing business" has always been held to require more than mere solicitation of orders. The regulations, on the other hand, extend

(Continued on page 38)

HYDROGEN COPPER BRAZING

COPPER BRAZED STEEL PARTS ARE EXTRA STRONG, NEED NO CLEANING AND CAN BE HEAT TREATED

For low cost mass production, steel products are now made from stampings in combination with other stampings and/or screw machine parts and copper brazed in hydrogen atmosphere. These assemblies often replace castings and costly machined parts.

SILVER BRAZING — BRIGHT ANNEALING

We are equipped with electric hydrogen furnaces and do high quality work at reasonable prices. Ask for quotations.

EDW. E. RUSSELL CO. TUTTLE AVENUE WALLINGFORD, CONN.

TEL. NEW HAVEN 2-1827

ACCOUNTING HINTS

Contributed by the Hartford Chapter National Association of Cost Accountants to stimulate the use of better accounting techniques in industry.

Control of Overhead Costs

In these days of rapidly rising costs and narrowing margins, a great deal of emphasis has been placed upon the control and reduction of overhead expenses. In recent years, overhead costs have formed an increasingly large portion of total cost, in some cases to an alarming extent. The reasons offered for this condition are varied and conflicting, but the fact remains that, regardless of reason, the application of a good system of overhead control, and the intelligent use of the facts developed by such a system, can result in substantial savings.

A budget system is the most effective means yet developed for the control of overhead costs, but the most accurately calculated budgets, and the most elaborately prepared reports, will fail of their purpose if the human element in overhead control is not fully evaluated. A budget system does not, of itself, control overhead, but is merely a means of directing attention to excessive expenditures. Unless a comparison of budgeted and actual expenses motivates the recipient to intelligent action to reduce or eliminate overhead expense, it is worse than useless .

Perhaps the most important single factor in the control and reduction of overhead cost is the development at the department head level of a keen cost consciousness, and a sense of common interest in the periodic results of company operations.

The following are some of the points which would appear to be of importance if a satisfactory reaction to budget and actual comparisons is to be developed:

a. The budget allowance should be established by the department head himself, with the advice and approval of management.

b. If the budget allowances are variable depending upon activity, the basis upon which the allowance is to be made should be realistic, and clearly understood by the department head.

c. The department head should be held responsible only for overhead costs over which he has direct and complete control.

Shortest Distance Between Two Points

★ **SAVES!** Overhead travel hurdles all floor barriers.

★ **REDUCES BREAK-EVEN POINT.** Surpasses competition by lowering unit cost.

★ **LOWERS COST . . .** speeds materials processing and handling.

★ **PROMOTES PROFITS.** Direct, non-stop flow of goods completes orders and billings.

WRITE • WIRE • PHONE for literature and information

THE **ALFRED B. KING** Company

CRANES • HOISTS • CONVEYORS • TRAMRAILS • CASTERS

200 WINCHESTER AVE., • NEW HAVEN 3, CONN.

★ ★ ★ ★ ★

KEEP YOUR BUSINESS ON THE MOVE

with modern materials handling

CLEVELAND Tramrails
CLEVELAND Cranes
CLEVELAND Hoists
BUSCHMAN Conveyors
DARNELL Casters
DARNELL Wheels
HAZARD Wire Rope
HAZARD Erection Equipment
ROLOCK "Georges"
AMERICAN CHAIN Slings
SPECIAL Trucks

Literature on all this equipment is available for you. Too, there is The Alfred B. King Company free engineering consultation service . . . without obligation to you. Your use of it in your early planning will permit you to enjoy the full benefit of modern materials handling engineering.

★ ★ ★ ★ ★

d. Technical accounting language should be eliminated from reports. Talk in a language the department head understands.

e. Give prompt attention to requests from department heads for more detailed analyses of expenditures, and promote a questioning attitude on their part. Adjust promptly any inequities in expense distribution.

f. The budget and actual comparison should give rise not only to criticism but to praise for effective performance wherever justified. Encouragement is equally as effective as criticism.

g. As often as possible discuss with each department head all of his overhead expenditures, not only those items which exceed budget allowance. A comprehensive discussion of overhead expenses seldom fails to reveal some expenditures which can be reduced or eliminated.

h. Discuss with department heads, either individually or collectively, the overall results of company operations to the fullest extent possible.

The development of a respective attitude on the part of the department head can lead not only to "control" but to "self-control," with all the advantages to the company that the latter term implies. The department head will be less inclined to consider a report of budget and actual expenses as an instrument of torture, devised by the "office" to make his already complicated business life more burdensome.

★ ★ ★

At its meeting of November 16, 1948 the members of Hartford Chapter N.A.C.A. will hear a discussion on the subject "Accounting for Materials" by Mr. Alfred M. Coles who is engaged in systems and methods work at the Pratt and Whitney Aircraft plant at East Hartford. A cordial invitation to attend this meeting which commences at 8 P. M. at the Indian Hill Country Club, Newington, is extended to all those who may be interested in the important subject of materials control.

Thomas W. Hall Co.
INCORPORATED
STAMFORD, CONNECTICUT
Printing
Newspaper & Lithographing Equipment
National Hand & Automatic Paper Cutters

FIRE BRICK CONSTRUCTION
• • •
Boiler Setting
Industrial Furnaces
Glass Melting Furnaces
Cupolas *Coke Ovens*
• • •
E. W. BRETT CO.
3-6104
West Hartford 35 Fairview St.

Taxation

(Continued from page 36)

the application of the tax to an activity which is nothing more than the solicitation of orders. It may be questioned whether or not this application of the tax constitutes a proper interpretation of "doing business" or even "commercial activity" within the meaning of the statute.

The legal doubts surrounding taxes of this kind leave the taxpayer in a state of uncertainty concerning the proper course of action. The uncertainty is aggravated by the fact that collection of such taxes from out-of-state concerns is extremely difficult for the taxing jurisdiction. By the very nature of the circumstances, the taxing authority cannot readily ascertain which out-of-state concerns are liable for the tax unless the taxpayer voluntarily inquires or reports. Then the tax collector can usually not obtain jurisdiction over the taxpayer to enforce collection, because the taxpayer is not "doing business" locally in the jurisdictional sense. The result is that these tax issues rarely get into the courts for a clear determination, but settlements are made in each individual case without establishment of any clear precedent for the guidance of others. It is small wonder under these conditions that many potential taxpayers have chosen to sit tight, waiting for the tax enforcement machinery of the foreign jurisdiction to find a way of collecting from them. When a practice of this kind becomes widespread, and when the taxes asserted remain uncollected and unsettled year after year in numerous cases, the general confusion of all taxpayers becomes greater and respect for the law is impaired.

One of the chief causes of trouble in this situation is the attempt on the part of a particular jurisdiction, such as New York City, to impose a tax when it does not have a clear and immediate power to enforce the levy. From this standpoint, it would seem to be advisable for a state or locality to make its taxes applicable only to business concerns or individuals over which it has clear jurisdiction for service of process purposes. This would probably mean restricting the application of local taxes to out-of-state concerns which maintain a place of business or stock of goods in the state, or which have for some other reason qualified to do business there. Undoubtedly there would be resistance to such a solution from those who feel that the state of market always deserves a share of the tax revenue from a commercial transaction. Yet this approach to the problem, if ultimately agreed to by all the states, would not only reduce the present danger of double taxation but would also alleviate much of the hardship which now faces small manufacturers and distributors in keeping up with the multitude of state tax laws and regulations affecting their sales to other states. This matter deserves the attention of those organizations which are now engaged in achieving interstate agreements or federal restrictions on state taxation of interstate business, such as the National Association of Tax Administrators or the Council of State Taxation of Merchandising Interstate Commerce.

BUSINESS TIPS

from

School of Business Administration

University of Connecticut

Getting Results from Music Systems*

DURING World War II, when acute shortages of manpower were in evidence, the management of industrial plants throughout the country were eagerly seeking devices and techniques which would either increase their man-hour productivity or else increase the over-all plant productivity. The playing of music during the work-cycle was one of the techniques offered to management which could satisfy both objectives. It was claimed that music, if played at the proper time during the work-day, would increase man-hour productivity. Plant productivity would be increased by the creation of a more desirable work-environment which would offer a greater attraction to the labor market.

These conditions resulted in a wholesale and haphazard installation of music systems throughout the country. After all, music was to be the panacea for many industrial ills; so it was believed. Today, as industry prepares for the return of more intensive competition, many managers have discovered that the heralded results of music had not materialized, and so, many music systems were discarded almost as quickly as they had been installed. In all too many cases, this abandonment was performed without first conducting an adequate analysis of the reasons for the apparent failure.

The Objectives of a Music Program

A music program is usually installed with a two fold purpose; either improve the working conditions and/or increase worker efficiency. For the most part, the improvement of working conditions represents, by itself, the less significant objective, because of the simplicity in its attainment. In general, the very act of playing music creates a greater job attractiveness; of course, individual appraisal would vary with respect to the type of music played. The principle of heterogenity in workers is consistently manifested in their manifold preferences for music. However, the mere playing of music does give these plants employee preference over non-music-playing plants. Many employers have reported that former employees, who had left and were re-applying for jobs,

* *This month's contribution was prepared by Arsen D. Emerzian, Dept. of Industry.*

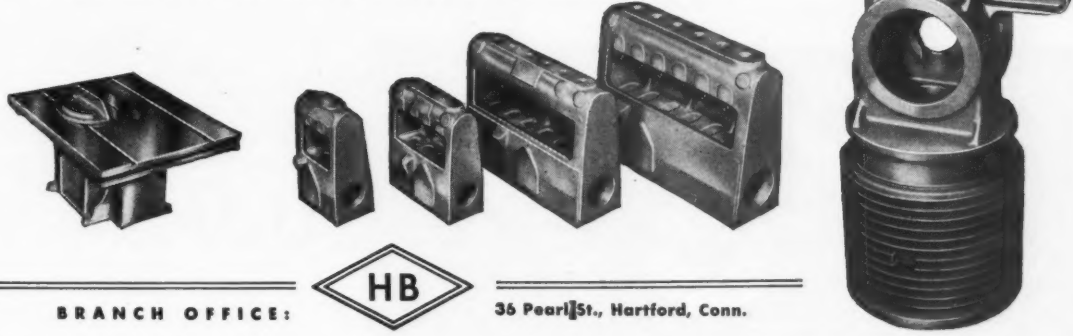
CASTINGS

NON-FERROUS

SAND • PERMANENT MOLD • DIE CASTINGS

Heat Treating Facilities · Laboratory and X-Ray · Pattern Shop

Permanent and Die-casting Molds, Designed and Machined



BRANCH OFFICE: HB 36 Pearl St., Hartford, Conn.

HAMPDEN BRASS & ALUMINUM COMPANY

FOUNDRY: SPRINGFIELD 1, MASSACHUSETTS

gave music as one of the reasons for returning.

Increasing worker efficiency is the primary objective of music programs, but it is also the more difficult to attain. The entire problem of improving efficiency must be approached through an analysis of the factors which influence efficiency, namely, fatigue and boredom. Worker boredom is due to a consciousness of uniformity and repetition in work tasks. The assumption seems to be that anything which will take the mind away from the work will reduce boredom. Music can do this.

The Key to Success

No industrial program can ever hope for success without planning; music offers no exception. The key to success here arises from the "what, when and hows" of industrial planning; what music to play, when and how to play it.

The first step in the planning process requires the services of trained personnel, and the installation of adequate equipment; to obtain one without the other is sheer folly. Some 2500 to 3000 plants throughout the country have installed the equipment, but less than half have developed a system beyond merely paging and lunch room music. Attempts to utilize the system for work-music has not been successful in many cases, because of the lack of trained personnel.

In determining what music shall be played, consideration must be given to such factors as function, age and sex. Music for office personnel should unquestionably be of a different type than employed under factory conditions. In general, there is a definite preference toward popular tunes with the women as the foremost proponents. This problem of employee preference and recognized variability in the reaction of people to music necessitates well-balanced programming and wide range of choice. Inasmuch as plants differ, no one set of programming procedures are uniformly applicable.

The final area of planning is the proper scheduling of music throughout the day. Although music is better than no music, and a well-balanced music program better than an ill-conceived one, maximum satisfaction cannot be achieved without properly determining the time-periods during which music should be played. Before such scheduling can be accomplished, an analysis must be made of the shape and amplitude of fatigue curves for the particular factory. This being achieved, the music can be scheduled to help counteract the effect of fatigue and thus reduce the loss of production.

In an experiment conducted by Burris-Meyer, it was discovered that when music, which was not specifically planned, was introduced into a plant, which never possessed a system, an 8 percent increase in production was recorded. However, when a planned music program was developed, the overall increase in production reached 14.8 percent.

What Are the Results?

Although there have been scattered reports of the benefits of music systems from time to time by individual plants, the first comprehensive work was done by the National Industrial Conference Board in their survey of music in industry. This survey, which represents management opinion in 111 plants, clearly demonstrates the nature of benefits which can emanate from a music system. The following are some of the areas in which benefits have been discovered.

Absenteeism

Nine of the plants reported a decline in absentee rates with three doubtful of its value. The remaining plants were unprepared to state an opinion largely because they had kept no records on the service in relation to absenteeism or else the system was too new to permit adequate analysis.

Turnover

Fifteen plants recorded reductions in turnover with greatest changes occurring in the lower-level jobs. Fourteen plants noticed no difference, two were doubtful of its value, and seventy-five made no attempt to determine the usefulness of music in relation to turnover. One of the main reasons offered for decreased turnover rates was the outward unwillingness of employees to work in plants without music once they had become accustomed to the service.

Safety

Lessened tension and reduced fatigue decreased accident rates in eight of the plants while the remainder noticed no appreciable difference in accident rates.

SINCE
1895

Elevators
for every purpose

• •

INSPECTIONS
REPAIRS
MAINTENANCE

• •

The
Eastern Machinery Co.
Factory at
NEW HAVEN

Individual Production

Twenty-nine of the one-hundred and eleven plants reported an improvement in production varying from a slight increase to one of thirty percent. The greatest benefits were found on night shifts as music effectively mitigated the sleepiness of the early morning hours. Definite increases in group production were also noted. On the other hand, some plants reported reductions in output due to employee distraction upon certain jobs.

Quality of Work

Fifteen plants reported a definite improvement in quality; a few reported adverse effects, but the majority did not feel qualified to express an opinion.

Individual Attitudes

Approximately fifty-four percent of the plants were of the opinion that music promotes greater harmony and good will among workers. Also, a greater interest in jobs and company was evidenced by a majority in addition to a definite reduction in the number of complaints.

Obviously, the figures contained in the survey do not represent statistical adequacy, nevertheless, they do offer the basis for some interesting generalizations. Of the total plants surveyed, a strong majority did not possess records concerning the operation of their music programs. It appears quite doubtful that this majority could possibly have developed a well balanced music program based upon principles of scientific planning and research. Therefore, it could be generalized that the majority of plants included in the survey were not obtaining the utmost from their music programs.

On the other hand, the survey does demonstrate that music systems can help to promote greater plant efficiency through favorable effects upon various avenues of cost. However, greater application of human intelligence and properly directed effort on the part of management is necessary before music systems can play a more important part in the march of industrial progress.

Business Pattern

(Continued from page 34)

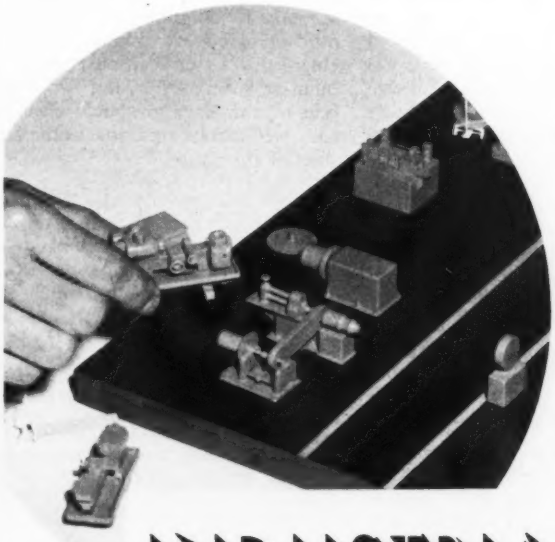
mated at about that level. Residential building, at 55%, is now a somewhat smaller proportion of the total.

Early this month the U. S. Census Bureau released a report showing population by states for the years 1940 and 1947. The summary reflects growth and migration between states which occurred during and following the war. The estimated population for the country as of July 1, 1947 was 143,400,000 an increase of 11,700,000 or 9%. Thirty-nine states showed net gains with those on the West Coast experiencing the largest growth, 41%. Connecticut's population rose from 1,709,000 in 1940 to an estimated 1,974,000 in 1947, an increase of 265,000 or 15.5%. The percentage gain for this state was greater than for any other Northeastern state and was ninth highest in the Nation.

For the Want of a Horseshoe Nail

(Continued from page 33)

ules. This lack of skilled manpower required the training of young men with mechanical aptitudes to become operators of tool processing machines. It also required intensive training of men who had operated machines on production work to be tool machinists.



FINGER-TIP Control!

Accuracy and certainty in the planning of production or material flow or the re-vamping of a department (or a whole plant) can so easily be yours . . . with the aid of layout boards and simplified three-dimensional models of machinery and equipment, material in process or in storage, and everything else using precious floor space.

Don't try to visualize all that you have in mind . . . actually SEE IT in miniature, scaled accurately ¼ inch to the foot! Make well-founded, final decisions before a single dollar is spent in the "heavy work". KNOW that you are RIGHT—with the aid of accurately-scaled layouts and models.

We cordially invite your inquiry, without obligation, that we may thoroughly demonstrate our usefulness to you.

INDUSTRIAL MODELS

ROCKPORT — MAINE

Models of PLANT LAYOUTS • OFFICE ARRANGEMENTS • MACHINERY • EQUIPMENT
EXPERIMENTAL DESIGNS • DISPLAY MINIATURES • STORES • ARCHITECTURAL PLANS
TRAFFIC SYSTEMS • OUTDOOR WORK AREAS

Trained mechanics were upgraded to become supervisors. Instead of operating under its old formula of one trainee for every ten skilled workers, it was forced to operate with five trainees for every skilled man on a basis of two twelve hour shifts, six to seven days a week, in order to overcome the manpower shortage. Try as they did to simplify and break down job operations, the owner-managers of small tool and die shops found that it was impossible to do so when working to the close tolerances necessary to permit the mass production industries to attain the highest production totals by the use of unskilled workers on work simplified jobs. This experience demonstrated clearly that *it is the complexity of Tool and Die industry operations that makes possible the simplicity of general manufacturing operations.*

Because of holding the rather unusual distinction of having its own customers' tool rooms as competitors, especially in a period of depressed busniess such as prevailed in the thirties, the tool and die shops were financially unable to replace their antiquated machinery prior to World War II. They were further handicapped because of the low priority originally allowed the Tool Industry during the early part of the war. Their replacement plan also suffered a further blow because of high taxes paid under the Excess Profits Tax Law, and the refunds required under the Renegotiation Act. As a result of these handicaps and the lack of administrative assistants, who might have taken greater advantage of the "certificate of necessity" privilege granted during the war, large numbers of small but mechanically efficient shops were left with little wartime profits and an inheritance of machinery either antiquated or worn out by heavy wartime usage. Although many of these small enterprises have purchased some relatively low-priced, surplus machinery from the War Assets Administration, large numbers of them are still short of the machinery which they should have to meet the demands that will surely be made upon them in the event of another national emergency.

Peaks, Valleys and Profits

The Special Tool and Die Industry suffers from what one might call an overdose of "peaks and valleys" of activity. During the beginning of an upsurge in general manufacturing activity in peace or war, especially when newly designed products are contemplated, the tool and die shops are called upon by the larger mass production industries to expand their facilities rapidly to make up for the lack of tool making capacity in the larger plants. When the tools are made and the larger plants are engaged in full production, the business of the special tool shops usually falls off sharply, unless the owners of the smaller plants are fortunate enough to build up a clientele of customers whose requirements are widely diversified and whose peak demands do not occur at one time. Unfortunately, most special tool shops are today just what their name implies—makers of specialized types of tools, which does not permit diversification to a degree sufficient to safeguard their assets.

As to the profit situation, we quote again from W. R. White, Jr., who says, "The profit trend of an individual tool and die shop will be determined by the aggregate policies of those manufacturing plants which purchase a portion of their tooling requirements from that shop. The diversity of its customers will benefit the tool shop in its operation, and while this diversity is the aim of every tool shop operator, still the nature of the industry and its products prohibit any wilful selection of an individual tool shop's customers. The experience of the thirties should have convinced every tool shop owner that it is his individual problem to convince his customers of the need and profitability of utilizing his facilities in normal peacetime . . . If the manufacturer can be convinced that his own toolroom should be used for maintenance only, and the tool shops for designing and building the tools, the manufacturer will find himself operating on a more efficient level with better designed and built tools, resulting in lower cost operation . . . an important consideration in the days of higher labor rates."

Space limits of this article forbid the use of statistics, but facts from questionnaires made by the National Tool and Die Manufacturers Association show that profits for the industry are substantially lower, on the average, than for other industries, and during a period of depression their losses are normally greater.

Conclusion

America needs a thriving Special Tool and Die Industry in the interests of national security as proved to some extent in World War I and completely proved by the performance of the industry in World War II. Likewise, in the opinion of many leading manufacturers who were questioned in 1946 by representatives of the magazine "American Machinist," American manufacturers can be more efficient in normal times by making full use of the facilities of first class tool and die shops. They say, in substance, that the use of tool and die shops accomplishes the following: (1) saves tooling time; (2) places burden of maintenance on outside organization (3) reduces investment in non-productive capital equipment and eliminates necessity of retaining sizeable toolroom personnel during slack periods; (4) reduces made-work programs for toolroom personnel in slack periods; (5) results in better quality tools at lower overall cost; (6) more rapid deliveries; (7) allows production executives to devote full energies to production problems; (8) enables contract manufacturer to stabilize operations to the point where he can employ only men of the highest skills.

Connecticut, where tool making was born, has a population of over 100 special tool and machine shops whose skills have contributed much to the world-wide reputation of the state for products of the highest quality. For the sake of our peacetime future and our preparedness for any national emergency, let us keep our special tool industry strong by giving it the support it must have to uphold Connecticut's well-earned tradition as the "tool shop of the nation."

Service Section

FACTORY MANAGER—Varied experience in the operating, production planning, and technical branches, in semi-precision machinery, hand tools, hardware, and consumer goods field. Products handled consisted of medium sized stamped, formed, drawn and forged shapes—with lacquered, enameled and plated finishes.

Specific Experience—Factory Manager — sheet metal machinery and hand tools; industrial engineer — business and accounting machines; chief engineer — electrical devices also handling tool room, drafting, design, inspection; assistant superintendent — household goods field, miscellaneous hardware, appliances.

Graduate Engineer—Stevens 1925 — M.E. degree — Age 46. Married. Address PW-1475.

FAIR TRIAL

By Opal Hill Munz

Marching With Democracy From Sea to Shining Sea . . Part II

A UNIT OF STUDY (for the fourth, fifth and sixth grades).

THE right to receive a fair hearing and a trial by jury was won after a long and bitter struggle.

The struggle began in the dim and distant days of barbarism when the accepted rule for settling quarrels, feuds and misunderstandings was "an eye for an eye and a tooth for a tooth."

Later tribal chieftains sat in prejudiced judgment over their subjects, ruthlessly and vindicatively measuring out punishment to guilty and unguilty alike.

The arbitrary will of selfish rulers continued to be imposed on helpless and defenseless people down through the course of history.

To fight against such practices was to invite death. But courageous people did dare to fight for the principle of a fair hearing and a trial by unprejudiced juries, and other individual freedoms. Gains were made only to be lost again. People continued to be put to death for crimes they did not commit without a hearing of any sort.

Great advances were made by the English for the cause of a fair trial when they demanded and got the Magna Carta.

Here in America our citizens were placed out of the reach of ruthless officials and vindicative persons by our Constitution and the Bill of Rights.

No greater words ever were penned for the cause of freedom than these nine from our Bill of Rights: "The right of trial by jury shall be preserved . . ."

Today dictators who glorify the principle of force scorn the right of a fair hearing. In countries where they rule with one-man might, violence supersedes the law.

Once again freedom loving people must rally to the defense of individual rights.

Now more than ever before it is vital for our children to know and understand the basic philosophies upon which our systems of government and economy are built.

Thomas Jefferson advocated the careful training of our youth in these words of wisdom and timelessness:

"History, by apprizing them (youth) of the past will enable them to judge of the future; it will avail them of the experience of other times and other nations; it will qualify them as judges of the actions and designs of men; it will enable them to know ambition under every disguise it may assume, and knowing it, to defeat its views. *Every government degenerates when trusted to the rulers of the people alone.* The people themselves are its only safe depositories. And to render them safe their minds must be improved."

It is with this thought in mind that we present this unit of study on FAIR TRIAL.

Scope

In developing this study, stories from English history which give our constitution's heritage, should be told:

(1) How the Normans brought to England in 1066 their feudal system which made it possible for a few to enslave the majority.

(2) How the Charter of Liberties and the Magna Carta were won.

(3) How the Habeas Corpus Act, the Petition of Rights, and the Bill of Rights brought to the English people the first assurance of fair trials.

The second portion of the unit of study should deal with stories from American history that tell:

(1) How the colonists learned to govern themselves.

(2) How they revolted from English authority.

(3) How they declared their independence.

(4) How the constitution and its first ten amendments, known as the American Bill of Rights, came to be written.

The final portion of this unit should deal with the specific freedom of FAIR TRIAL, the right to receive a fair hearing, which the American Bill of Rights guarantees, and *which is generally one of the first rights of the people which despots and tyrants destroy.*

General Purpose

The general purpose of this unit of study is to supplement and enrich the school curriculum.

Besides the textbooks already in use these additional books will make excellent source material: *The Making of a Democracy,* Hartman (the first 71 pages give stories of democracy's English background); *Story of American Democracy,* Casner and Gabriel; *First Book of American History,* Beard and Bagley; *Beginning of Our Nation,* Knowlton and Hill; "The Signing of the Declaration of Independence," a story from *Good Stories of Great Holidays,* Alcott; *The Living Constitution,* McBain; *Colonists and the Revolution,* Barstow; *Great Moments in Freedom,* Lansing; *You and Your Government* (pages 264-268 for material on American Bill of Rights), Aker and Aker.

* *See footnote on Connecticut References.*

Aims

The specific aims of this unit are:

(1) To give an emotional as well as an intellectual appreciation of the great principles outlined in our American Bill of Rights.

(2) To show that our Bill of Rights is a set of rules under which we agree to live in friendship and understanding.

(3) To make clear that the Bill of Rights is the very cornerstone upon which are based democracy and its counterpart, the American individual free enterprise system.

(4) To make clear that these rights which we take for granted are unknown to millions of people in the world.

(5) To emphasize that there are forces in the world today that seek to destroy the freedoms guaranteed by our Bill of Rights and to

* *Connecticut and the Federal Constitution* and *Connecticut at the Start of the Fourth Century* published in pamphlet form by State Department and Education and Connecticut—*The State and its Government,* published by the Oxford Book Company.

Copyright 1948 by Texas Manufacturers Association

set up in their place a way of life based on dictator control and one-man rule.

(6) To make clear that the principles of freedom as expressed in the American Bill of Rights are in *sharp contrast* to the "protective custody" provision in governmental documents of dictators, by which dictators may arrest, hold in concentration camps, and execute prisoners, guilty and innocent alike, without benefit of trial.

Launching the Unit

A story with a connected thread of interest extending through several closely integrated units of study is likely to make a deeper impression than a group of disconnected stories. So we have chosen the continued story as a way of developing a sustained interest in the series of studies on the general theme, MARCHING WITH DEMOCRACY FROM SEA TO SHINING SEA.

This is the second chapter of the story which tells of the experiences of Antares, the star-boy, who is living on earth and learning about the American way of life.

The Story: Mule-Ears

As Johnny Miller sauntered down the shaded Hartford street toward the home of Benny Mac Hall, he was wondering what kind of fun he would have before the day was over.

Yesterday he had been almost a complete failure. He had lost about half of his marbles in a game of keeps behind the garage, he had got into a quarrel with some boys at the park and they had refused to let him play ball with them, and for dropping the tom-cat into a bathtub full of water to see how well he could swim, his mother had obliged him to stay home from the Fourth of July carnival and picnic.

Right now he was whistling, not because he was happy, but in the hope that if he stirred up a little noise, he would attract a few other boys out of the houses to tell him about what took place at the carnival last night. His hands were thrust deep into the pockets of his blue jeans. He was scuffling his feet.

Suddenly as he got close to the house where Benny Mac Hall lived with his parents, he stopped short, for out of the corner of his eye he had seen something very strange. He broke off whistling right in the middle of a tune, and decided to wait and see what would happen.

Antares, the star-boy, who now lived with Mr. and Mrs. Hall and Benny Mac, had come out of the door of the white frame house in front of Johnny, and was standing on the edge of the porch looking up and down the street.

Johnny had never seen anybody like him before, and he thought the stranger looked like a foreigner.

He was dressed like other boys he knew, except he was wearing a funny looking pointed hat and his skin was sort of yellow . . . not yellow like a Chinese or a Japanese . . . just a faint golden glow.

Antares did not at first see Johnny. He looked up at the sky, right into the face of the early morning sun, and he spoke half aloud: "So this is my American home?"

"Speaks English, anyway," whispered Johnny to himself.

Just then Antares saw Johnny. He was a little surprised, but he bowed politely.

Johnny turned around and walked backward, making faces at Antares. He stuck out his tongue, put his fingers to his ears and made mule ears, wiggling his fingers just as fast as he could.

Antares watched Johnny go off down the street. "The honorable Americans have a very strange greeting," he thought to himself. But he practiced sticking out his tongue, and wiggling his fingers from his ears, thinking that here in America he must do as Americans do.

Just then another neighborhood boy, named Jerry Young, came down the street. As soon as Antares saw him he put his hands behind his ears, stuck out his tongue, and wiggled his fingers, making mule-ears.

Of course Jerry did not know what Antares was trying to do. He wondered if he were crazy or if he were making fun of him.

"What's the big idea?" asked Jerry.

"The honorable big idea of what?" asked Antares.

"Making faces at me," Jerry said. He also stuck out his tongue and made mule-ears.

"Is not that the greeting of the hnorable Americans?" Antares asked.

Jerry twisted his nose and made a face, because he thought it was silly to call everything honorable.

"You surely do talk goofy," said Jerry.

"What is the honorable goofy," asked Antares, wishing Benny Mac and Mr. and Mrs. Hall were standing beside him to explain things just as they had done last night at the carnival.

"Oh, skip it," said Jerry, not wanting to explain. "Where you from?"

"From the sky, honorable boy," answered Antares. "My mother is the moon and my father is the sun, and I'm Antares, the star. I got unhappy with my work in the heavens and jumped over the balcony. Finally I arived here. I landed at the Fourth of July Carnival last night where I met Mr. and Mrs. Hall and Benny Mac. They have invited me to live with them and learn to be a good American citizen."

"Well," said Jerry, "where did you learn to speak such goofy English, and why do you call everything honorable; even me?"

"I learned the word honorable at the carnival last night," Antares told Jerry. "There was a speaker who told us to be a good American citizen we must honor our flag, we must honor our laws, we must honor our leaders, we must honor everything that is American. You are an American boy, so I honor you too."

Jerry laughed. There was something about the stranger that made you like him. "I'll bet you can't stand on your head," he said to Antares, suddenly wanting to be friendly.

"No," said the boy, "but I know the star-li-ra-li."

"What's that?"

Instead of explaining to Jerry in words, Antares took him by the wrist, and with a quick turn, threw him backward, and tumbled him to the ground.

Jerry sat up and scratched his head.

"Gee, I got to learn that!" he exclaimed in admiration. "I'd like to try that out on Johnny the next time he jumps on somebody or starts a quarrel."

"Who is the honorable Johnny?" asked Antares.

"He isn't honorable," answered Jerry. "He's a big bully."

"Big bully, like the dictators that run some parts of the Good Earth?" asked Antares, remembering what Mr.

Hall told him last night about dictators.

"Yes," said Jerry. "And he's going to get what's coming to him one of these days, just like dictators do."

Antares and Jerry had got to be good friends by the time Mrs. Hall sent Benny Mac to the door to tell Antares breakfast was ready and to invite Jerry to come along and eat with them.

But Jerry had already eaten, and he was eager to tell his mother about his new friend so he said, "No, thank you," and hurried off in the direction of his home.

As soon as breakfast was over Mrs. Hall suggested that Benny Mac clear the table and that Antares take a letter to the corner and mail it.

"Here in the home, each of us must have responsibilities," Mrs. Hall explained.

When Antares came out of the house with the letter in his hand and started toward the corner, he ran almost smack into Johnny before he saw him.

Johnny gave Antares a shove, and standing before him with legs apart said, "Where do you think you're going?"

"Honorable friend," he said, "Mrs. Hall has asked me to mail this letter. Can you tell me where to put it?"

"Sure," said Johnny. "I'll show you." He pointed to a couple of posts. On one of the posts was a green mailbox on the other was a red fire alarm box.

"The red box," asked Antares, "or the green one?"

"Huh!" said Johnny, "the red one, of course."

When he saw Antares hesitating, Johnny urged. "Go ahead put it in. Just pound on the glass with a little hammer, and they'll come right after it."

Antares picked up the hammer and smashed the glass.

"They'll be here in half a minute," said Johnny.

Suddenly the distant sound of a fire siren was heard, growing louder and louder, and coming closer and closer, until the fire truck rolled down the street and stopped in front of the house. Six or eight firemen jumped off with a fire hose.

"Where's the fire, kids?"

Johnny pointed to Antares. "Ask him," he said. "He rang the alarm."

Antares did not understand. He handed the letter to the fireman with a bow. "If the honorable gentleman will please take the letter," he said.

Of course the firemen did not know that Antares had just come to GOOD EARTH to live.

"Trying to be funny?" asked one fireman.

"Say, kid," asked another, "did you ring that fire alarm?"

"I guess we'll just take you down to the station house," one of the firemen said to Antares, "and teach you a little lesson."

Antares was thoroughly frightened. He turned to ask Johnny to explain, but while the firemen had been talking to Antares, Johnny had sneaked off around the corner.

Antares felt the same sudden panic that had caused him to leap through a niche of time, when Jupiter had threatened to take him off to the milky way.

"Oh, please, honorable sir . . ."

Two firemen took Antares between them and led him to the fire truck, and they went roaring down the street. All the time Antares was crying, "Oh, please, honorable sir . . ."

But as it turned out, nothing very terrible happened to Antares at the station house. The chief talked to him, and learned the truth. Then he gave Antares a ball and had one of his men take him back to Mr. and Mrs. Hall's home.

By later afternoon word had spread all over the neighborhood of Johnny's unkind treatment of Antares and several of the boys and girls had gathered on the porch of Mr. and Mrs. Hall's home with Benny Mac and Antares to talk about what they ought to do.

"I know what I'm going to do," declared one boy. "I'm going to sock him in the nose."

"Better still," said Jerry, "let's have Antares teach us all the star-li-ra-li tricks and then waylay Johnny some day and let him have it good."

"Well, just remember one thing," said Mr. Hall, who was sitting on the steps, smoking his pipe. "It is always better to use your head to settle a quarrel than to use your fists."

"Yes," said Benny Mac, "Johnny is so used to fighting, it won't teach him anything for us to beat him up."

"That's just what I've been thinking," said Jerry.

"I have no wish to get even," said Antares. "But I would like to be friends."

"But we've got to do something," one of the girls said. "He's always pulling my hair and snatching my ribbons."

"Well," said Mr. Hall, "I'm going inside to read my paper while you settle your problems. Just remember that Johnny hasn't always been this way and don't be too tough with him."

As the children called goodnight to Mr. Hall, Johnny came swaggering down the sidewalk and into the yard.

"Huh!" he exclaimed, "a tea-party!" He walked close to Jerry. "Sissy."

"You just stay away," said Jerry.

"Yeah!" sneered Johnny. "Who's going to keep me away?"

"I will," said Jerry stoutly.

"You and whose army?" demanded Johnny.

"Foreigner," said Johnny, pointing to Antares.

"Listen here," said Jerry, getting up and standing beside Antares, "you ought to be ashamed of yourself."

"Go on home, Johnny," said Benny Mac, "if you can't be polite."

Johnny put out his tongue at Benny Mac and said. "Ya-aaa!" because he couldn't think of anything else to say. Then he picked up a stick and put it on his shoulder. "Just dare you to knock it off," he said to Benny Mac.

Then suddenly Jerry had a happy thought. "Let's have a court, and try Johnny. "Let's try him," he said.

"Yes, let's," chorused the children. "That's a fair way to settle a quarrel. That's better than fighting. Let's try Johnny for being unkind to Antares."

"Let Bob be judge," said Benny Mac, "he's fair."

Bob ran across the street to his own home, and came back in a moment with his cap on backward, horn rimmed spectacles, and an apple box to serve as the judge's bench. Several of the boys picked up tree limbs and sticks and acted as guards.

"I'll be prosecutor," said Irene.

"I'll defend Johnny," said Mary.

Others made themselves jurors and the trial started.

Bob had Antares take the stand and point out Johnny as the boy who had tried to get him into trouble.

Johnny said he had just been teasing when he told Antares to pound on the fire alarm box, but Irene made him admit he did not tell the truth even when the firemen came and took Antares away.

Then Irene made a speech to the jury.

"You ought to do something pretty awful to Johnny because he picked on Antares. Just because he came from somewhere else and is different from

us, is no sign we ought to be unkind to him, like Johnny was."

Now it was Mary's turn to make a speech.

"Johnny has been thoughtless," she said, "but he ought to be given another chance. Everybody is thoughtless sometimes."

The jurors went out, and while they were gone Bob and Benny Mac and all the rest, even Johnny and the guards, played a guessing game.

Soon the jury came back.

"Boys and girls of the jury, have you reached a verdict?" asked Bob.

While the jurors had been out, they had put their heads together and agreed to announce the verdict in a song. So now they sang:

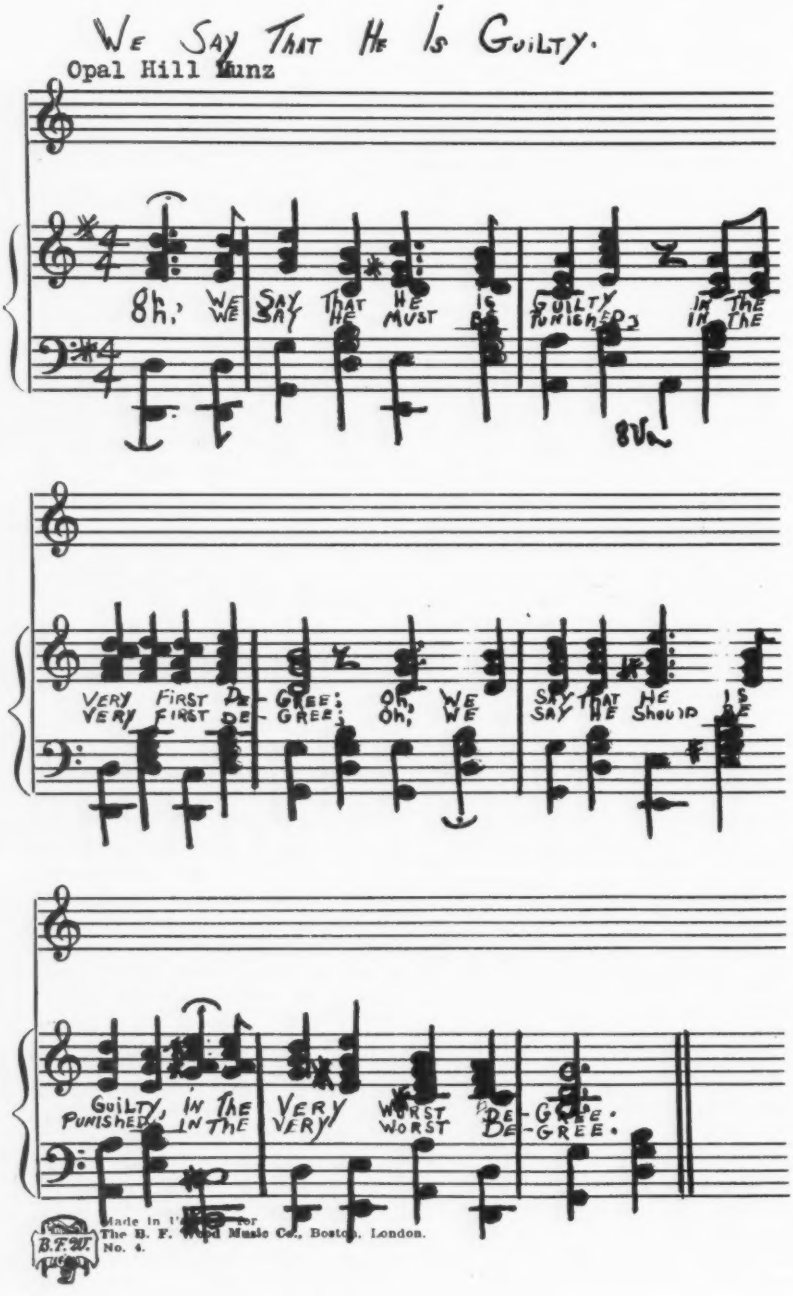
Bob and the guards and Mary and Irene, took up the song when the jurors had finished. They changed it a little, pointing first at the jurors and then at Johnny. They sang:

"Oh, they say that he is guilty,
In the very first degree;
Oh, they say that he is guilty,
In the very worst degree.

Oh, they say he must be punished,
In the very first degree,
Oh, they say he must be punished,
In the very worst degree.

By this time Johnny was feeling quite ashamed of his unkind treatment of Antares, and he fell in with the spirit of the others, and sang very solemnly and dolefully, making everybody laugh:

"Oh, they say that I am guilty,
In the very first degree;
Oh, they say that I am guilty,
In the very worst degree.

Oh, they say I must be punished,
In the very first degree;
Oh, they say I must be punished,
In the very worst degree."

Then Bob said, "Stand up, Johnny, and get what's coming to you. It hurts me to do this," Bob continued, "but I sentence you to let Antares give you the star-li-ra-li works."

"I do not want to hurt the honorable boy," said Antares, "if he will be my friend."

Johnny had never been so surprised in his life. "By jiggers," he exclaimed, "do you mean that?"

"My honorable lips speak the truth," said Antares.

"Shake, kid," said Johnny, putting out his hand, "you're a better man than I am. I'm sorry I called you names."

"Now we are friends," said Antares.

"Bravo, bravo," called Mr. Hall from the doorway. He came out on the porch and put his hands on the shoulders of Antares and Johnny. "That's what I call settling a dispute and quarrel in a democratic way . . . a real trial . . . a real jury . . . with everybody having his say. But for a while I surely thought there was going to be a knock-down and drag-out fight."

Mr. Hall put his hand into his pocket and pulled out a five dollar bill, and handed it to his son, Benny Mac. "Here," he said, take the gang down to Bradley's drugstone and buy everybody an ice cream cone."

"Last one there is a rotten egg," said Benny Mac, as he jumped over the porch rail into the yard.

With that challenge everybody started running down the street yelling like a wild Indian.

Antares and Johnny, hand in hand, were leading all the rest as the group disappeared around the corner.

Mr. Hall was chuckling as he went back into the house. He was thinking that these boys and girls, daily and habitually practicing in their own back yard the democratic principles of give-and-take, square shooting, fair play, and honest and fearless thinking, were the best protection America had against the threat of dictatorship.

Things to Do

There is practically no limit to the activities that can be carried on in connection with this unit of study. Those suggested are well adapted to group work. Choose ones that most appeal to your group and which seem to contribute most to achieving your purpose.

These will serve as starters. You and your pupils will think of others.

Picture Gallery of Heroes of Democracy

Let pupils volunteer to find stories about some of the early heroes of democracy: George Washington, Benjamin Franklin, Nathan Hale, Patrick Henry, Thomas Jefferson, Thomas Paine, George Mason, Andrew Jackson, William Penn and others.

The teacher should either have books containing these stories on the browsing table in the classroom, or be sure they are available in the public library.

Set aside a listening period each day when the teacher will read aloud the stories which the children have found.

After all the stories have been read suggest that the pupils make a picture gallery of these heroes of democracy.

Pictures large enough to be seen across the room when mounted on 18 by 24 poster boards and hung on the wall should be used. (These pictures may be ordered from Perry Picture Company, Malden, Massachusetts.)

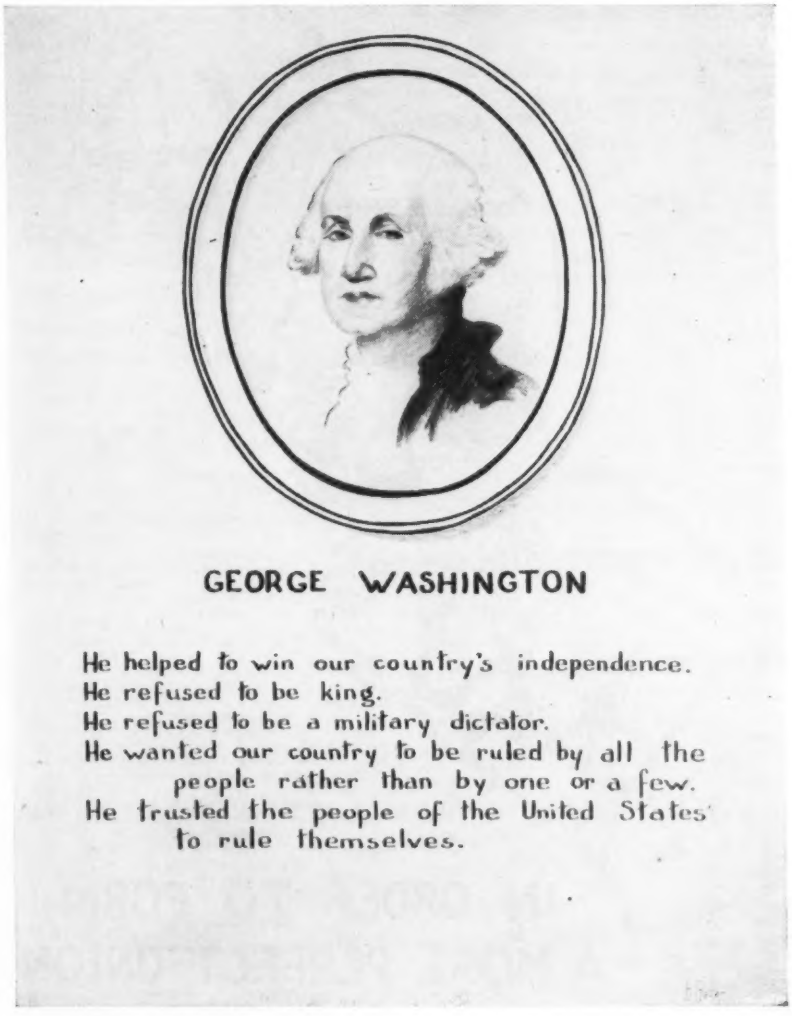
To encourage self-expression, and to help the pupils crystallize their thinking, have an informal discussion period during which time they will tell why these historical characters are heroes of democracy. A stenographic copy of the children's remarks may be made and later copied as legends beneath the pictures.

Example 1: George Washington. He helped to win our country's independence. He refused to be king. He refused to be a military dictator. He wanted our country to be ruled by all the people rather than by one or a few. He trusted the people of the United States to rule themselves.

Example 2: Nathan Hale. He was willing to die so that the people of our country might be free. He was a soldier in the war we fought to win our independence. Before he became a soldier he made speeches telling Americans to stand up for their rights. He became a spy to get needed information about our enemy. He was caught by the enemy and hanged. He made a brave speech that ended with these words: "I only regret that I have but one life to give for my country."

Example 3: William Penn. He was a Quaker. He believed in the right of all to vote. He believed in trial by jury. He believed in freedom of religion. He proved that people could govern themselves.

Example 4: Thomas Jefferson. He wrote our Declaration of Independence. He said: "All men are created equal." He said: "All men are endowed by their Creator with certain inalienable rights; that among them are life and liberty and the pursuit of happiness." He was our third presi-


GEORGE WASHINGTON
He helped to win our country's independence.
He refused to be king.
He refused to be a military dictator.
He wanted our country to be ruled by all the people rather than by one or a few.
He trusted the people of the United States to rule themselves.

LOOK AND LEARN—The dual presentation of textual matter and pictures is useful in developing an understanding of a message. The combination may be used effectively in creating a picture gallery to tell the story of our heroes of democracy.

dent. He believed in the people. He said: "That government is best which governs least." He meant that government, like an umpire at a ball game, should only step in to make decisions when necessary to protect the welfare of the people, or individual rights as recognized by the Constitution.

Visit to Courtroom

Plan to take the pupils to a courtroom to visit a trial in progress. The teacher should prepare the children for definite democratic procedures they are going to see and hear. She should see that the children follow the trip experiences with some other type of activity. Oral or written reports will serve as a method of self-expression about the meaning of democratic freedom as expressed in a fair trial.

Mural

Make a mural of the preamble to the Constitution.

Read the preamble to the pupils. Questions and comments will contribute to interest in, and an understanding and appreciation of the ideals presented.

Help the children to think on how their lives would be changed and affected if we had no Constitution, or if our democratic form of government became a dictatorship. Help them to see that as long as our government is a democracy we can control its operations and policies, because WE THE PEOPLE are the government.

Read the preamble a second time, asking the pupils to listen for phrases suitable for illustration with picture definitions. They will likely discover that every phrase expresses an idea that can be defined with pictures.

Eight Scenes

In planning the mural the pattern for it will probably fall into eight scenes as follows:

(1) We the people of the United States . . .
(2) In order to form a more perfect union . . .
(See ilustration)
(3) Establish justice . . .
(4) Insure domestic tranquility . . .
(5) Provide for the common defense . . .
(6) Promote the common welfare . . .
(7) Secure the blessings of liberty to ourselves and to our posterity . . .
(8) Do ordain and establish this Constitution for the United States of America.

Before starting to work plan a trip to some public building such as the post office, library or courthouse to see some murals.

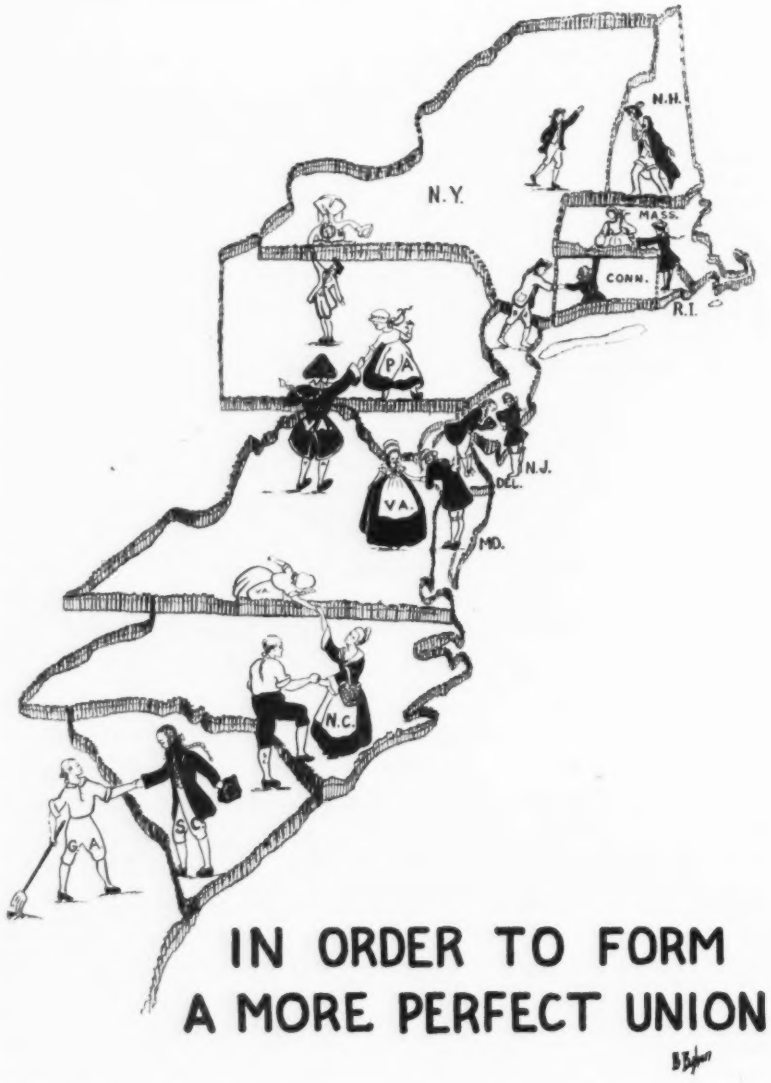
At this point the children will be ready to put their ideas on paper.

On the blackboard, or across one wall of the room, fasten with transparent gummed tape a long piece of brown wrapping paper about 16 feet long. Divide the paper into eight 24-inch sections, with heavy black ruling.

Either poster paint or soft colored chalk may be used to draw and fill in the scenes. If chalk is used smearing may be prevented by spraying the completed scenes with a fixative. Fixative may be bought at an art store or made by mixing clear shellac with an equal amount of alcohol. It may be applied by means of a fly spray gun. (Do not use either of these ingredients in a room where there are lighted stoves and fires.)

Each child should be allowed to register for the scene on which he wishes to work, so there will be eight working groups.

When the mural is finished there should be a period of evaluation.



HANDS ACROSS THE BORDER—Pictures make real the meaning of terms which might otherwise be abstract. For scene two of the mural on the preamble to the constitution, this drawing expresses the colonist's growing sense of the need for unity.

IT'S MADE IN CONNECTICUT

EDITOR'S NOTE: This department, giving a partial list of peace-time products manufactured in Connecticut by company, seeks to facilitate contacts between prospective purchasers in domestic or foreign markets and producers. It includes only those listings ordered by Connecticut producers. Interested buyers may secure further information by writing this department.

(Advertisement)

Accounting Forms
Baker Goodyear Co The — New Haven

Accounting Machines
Underwood Corporation — Bridgeport

Adding Machines
Underwood Corporation — Bridgeport

Advertising Specialties
H C Cook Co The 32 Beaver St — Ansonia
Waterbury Companies Inc — Waterbury

Aero Webbing Products
Russell Mfg Co — Middletown

Air Compressors
Spencer Turbine Co The — Hartford

Air Conditioning
Norwalk Airconditioning Corp The (forced air heating units oil fired) — South Norwalk

Aircraft
Chance Vought Aircraft Division United Aircraft Corporation (airplanes) — Stratford
Sikorsky Aircraft Division United Aircraft Corporation (helicopters) — Bridgeport

Aircraft Accessories
Chandler Evans Division Niles-Bement-Pond Co (jet engine accessories, aircraft carburetors, fuel pumps, water pumps and Protek plugs) — West Hartford
Warren McArthur Corp (Airplane Seatings) — Bantam

Aircraft Electrical Testing Equipment
United Advertising Corp, Electrical Division — New Haven

Aircraft—Repair & Overhaul
Airport Department Pratt & Whitney Aircraft Division — Rentschler Field East Hartford
United Airports Div United Aircraft Corp — Rentschler Field East Hartford

Aircraft Tubes
American Tube Bending Co Inc — New Haven

Air Ducts
Wiremold Co The (Retractable) — Hartford

Airplanes
Chance-Vought Aircraft Div United Aircraft Corp — Stratford

Aluminum Castings
Eastern Malleable Iron Company The — Naugatuck
Newton-New Haven Co 688 Third Avenue — West Haven

Aluminum Forgings
Scovill Manufacturing Company — Waterbury 91

Aluminum Goods
Waterbury Companies Inc — Waterbury

Aluminum Ingots
Lapides Metals Corp — New Haven

Aluminum Lasts
Shoe Hardware Div U S Rubber Company — Waterbury

Aluminum—Sheets & Coils
United Smelting & Aluminum Co Inc — New Haven

Ammunition
Remington Arms Co Inc — Bridgeport
Winchester Repeating Arms Company Division Olin Industries Inc — New Haven

Anodizing
Conn Metal Finishing Co — Hamden

Apparel Fabrics—Woolen & Worsted
Broad Brook Company — Broad Brook

Artificial Leather
Permatex Fabrics Corp The — Jewett City
Zapon Div Atlas Powder Co — Stamford

Asbestos
Auburn Manufacturing Company The (gaskets, packings, wicks) — Middletown
Raybestos Div of Raybestos-Manhattan Inc The (brake linings, clutch facings, sheet packing and wick) — Bridgeport

Asbestos & Rubber Packing
Colt's Manufacturing Company — Hartford

Assemblies—Small
Greist Manufacturing Co The — New Haven
Han-Dee Spring and Manufacturing Co The (Small) — Hartford
Wallace Barnes Co The Div Associated Spring Corp — Bristol

Auto Cable Housing
Wiremold Company The — Hartford

Automatic Control Instruments
Bristol Co The (temperature, pressure, flow, humidity, time) — Waterbury

Automobile Accessories
Kilborn-Sauer Company (lights and other accessories) — Fairfield
Raybestos Div of Raybestos-Manhattan Inc The (brake lining, rivet brass, clutch facings, packing) — Bridgeport

Automotive Friction Fabrics
Russell Mfg Co The — Middletown

Automotive Parts
Eis Manufacturing Co (Hydraulic and Mechanical) — Middletown

Automotive & Service Station Equipment
Raybestos Div of Raybestos-Manhattan Inc The (brake service machinery) — Bridgeport
Scovill Manufacturing Company (Canned Oil Dispensers) — Waterbury 91

Automotive Tools
Eis Manufacturing Company — Middletown

Bakelite Moldings
Waterbury Companies Inc — Waterbury
Watertown Mfg Co The — Watertown

Bakery Ovens
American Machine & Foundry Co — New Haven

Balls
Abbott Ball Co The (steel bearing and burnishing) — Hartford
Hartford Steel Ball Co The (steel bearing and burnishing, brass, brcnze, monel, stainless aluminum) — Hartford
Kilian Steel Ball Corp The — Hartford

Barrels
Abbott Ball Co The (burnishing and tumbling) — Hartford
Hartford Steel Ball Co The (tumbling) — Hartford

Bathroom Accessories
Autoyre Company The — Oakville
Charles Parker Co The — Meriden

Bath Tubs
Dextone Company — New Haven

Bearings
Fafnir Bearing Co (ball) — New Britain
New Departure Div of General Motors (ball) — Bristol
Norma-Hoffmann Bearings Corp (ball and roller) — Stamford

Bellows
Bridgeport Thermostat Company Inc (metallic) — Bridgeport

Bellows Assemblies
Bridgeport Thermostat Company Inc — Bridgeport

Bellows Shaft Seal Assemblies
Bridgeport Thermostat Company Inc — Bridgeport

Bells
Bevin Brothers Mfg Co — East Hampton
Gong Bell Co The — East Hampton
Gaynor Electric Company Inc (and buzzers) — Bridgeport
N N Hill Brass Co The — East Hampton

Belt Fasteners
Bristol Company The — Waterbury
Saling Manufacturing Company (patented self-aligning) — Unionville

Belting
Hartford Belting Co — Hartford
Russell Mfg Co The — Middletown
Thames Belting Co The — Norwich

Benches
Charles Parker Co The (piano) — Meriden

Bends—Pipe or Tube
National Pipe Bending Co The — 160 River St New Haven

Bent Tubing
American Tube Bending Co Inc — New Haven

Bicycle Coaster Brakes
New Departure Div General Motors Corp — Bristol

Bicycle Sundries
New Departure Div General Motors Corp — Bristol

Binders Board
Colonial Board Company — Manchester

Biological Products
Ernst Bischoff Company Inc — Ivoryton

Blacking Salts for Metals
Mitchell-Bradford Chemical Co — Bridgeport

Blades
Capewell Manufacturing Company Metal Saw Division (hack saw and band saw) — Hartford

Blankets—Automatic
General Electric Company — Bridgeport

Bleaching, Dyeing, Printing & Finishing
Glasgo Finishing Co The — Glasgo
United States Finishing Company The (textile fabrics) — Norwich

Blocks
Howard Company (cupola fire clay) — New Haven

Blower Fans
Colonial Blower Company — Plainville
Connecticut Blower Company — Hartford
Spencer Turbine Co The — Hartford

Blower Systems
Colonial Blower Company — Plainville
Connecticut Blower Company — Hartford
L R Mfg Div of The Ripley Co — Torrington

Blueprints and Photostats
Joseph Merritt & Co — Hartford

Boilers
Bigelow Co The — New Haven
Petroleum Heat & Power Co (domestic only) — Stamford

Bolts & Nuts
Blake & Johnson Co The (nuts, machine screw-bolts, stove) — Waterville
Clark Brothers Bolt Co — Milldale
O K Tool Co Inc The (T-Slot) — 33 Hull St Shelton

Bonderizing
Clairglow Mfg Company — Portland
Leeds Electric and Mfg Co The — Hartford

Box Board
Lydall & Foulds Paper Co The — Manchester
National Folding Box Co Inc — New Haven
New Haven Pulp & Board Co — New Haven
Robertson Paper Box Co — Montville
Robert Gair Co — Portland

Boxes
Clairglow Mfg Company (metal) — Portland
Connecticut Container Corporation (corrugated shipping containers and interiors) — Wallingford
Folding Cartons Incorporated (paper, folding) — Manchester
Merriam Mfg Co (steel cash, bond, security, fitted tool and tackle boxes) — Durham
Robert Gair Co (corrugated and solid fibre shipping containers) — Portland

Boxes & Crates
City Lumber Co of Bridgeport Inc The — Bridgeport

Boxes—Paper—Folding
Atlantic Carton Corp — Norwich
Bridgeport Paper Box Co — Bridgeport
Carpenter-Hayes Paper Box Co Inc The — East Hampton
M S Dowd Carton Co — Groton
National Folding Box Co Inc (paper folding) — New Haven
New Haven Pulp & Board Co The — New Haven
Robertson Paper Box Co — Montville
Robert Gair Co — Portland
S Curtis & Son Inc — Sandy Hook
Warner Brothers Company The — Bridgeport

Boxes—Paper—Setup
Bridgeport Paper Box Co — Bridgeport
Heminway Corporation The — Waterbury
Strouse Adler Company The — New Haven

Braided Fiberglas Sleeving
Ansonia O & C Co — Ansonia

Brake Cables
Eis Manufacturing Co — Middletown

Brake Linings
Raybestos Div of Raybestos-Manhattan Inc The (automotive and industrial) — Bridgeport
Russell Mfg Co The — Middletown

Brake Service Parts
Eis Manufacturing Co — Middletown

Brass & Bronze
American Brasss Co The (sheet, wire, rods, tubes) — Waterbury
Bristol Brass Corp The (sheet, wire, rods) — Bristol
Chase Brass & Copper Co — Waterbury
Miller Company The (phosphor bronze and brass in sheets, strips, rolls) — Meriden
Plume & Atwood Mfg Co The (sheet, wire, rod) — Thomaston
Scovill Manufacturing Company — Waterbury 91
Thinsheet Metals Co The (sheets and rolls) — Waterbury

Brass & Bronze Ingot Metal
Plume & Atwood Mfg Co The — Thomaston
Whipple and Choate Company The — Bridgeport

Brass Goods
Plume & Atwood Mfg Co The (to order) — Waterbury
Rostand Mfg Co The (Ecclesiastical Brass Wares) — Milford
Scovill Manufacturing Company (To Order) — Waterbury 91
Waterbury Companies Inc (to order) (small sheet metal parts) — Waterbury
Winchester Repeating Arms Company Division Olin Industries Inc — New Haven

(Advt.)

Brass Mill Products
Bridgeport Brass Co — Bridgeport
Chase Brass & Copper Co — Waterbury
Plume & Atwood Mfg Co The — Thomaston
Scovill Manufacturing Company — Waterbury 91

Brass Stencils—Interchangeable
Fletcher Terry Co The — Box 415, Forestville

Brass Wall Plates
Gaynor Electric Company Inc — Bridgeport

Brick—Building
Donnelly Brick Co The — New Britain

Bricks—Fire
Howard Company — New Haven

Bright Wire Goods
Sargent & Company (Screw Eyes, Screw Hooks, Cup Hooks, Hooks and Eyes, C. H. Hooks) — New Haven

Broaching
American Standard Co — Plantsville
Hartford Special Machinery Co The — Hartford

Brooms—Brushes
Fuller Brush Co The — Hartford

Buckles
B Schwanda & Sons — Staffordville
G E Prentice Mfg Co The — Kensington
Hatheway Mfg Co The (Dee Rings) — Bridgeport
Hawie Mfg Co The — Bridgeport
John M Russell Mfg Co Inc — Naugatuck
North & Judd Manufacturing Co — New Britain
Patent Button Co The — Waterbury
Shoe Hardware Div U S Rubber Company (footwear, clothing and strap) — Waterbury
Waterbury Companies Inc — Waterbury

Buffing & Polishing Compositions
Apothecaries Hall Co — Waterbury
Lea Mfg Co — Waterbury

Buffing Wheels
Williamsville Buff Mfg Co The — Danielson

Burners
Plume & Atwood Mfg Co The (kerosene oil lighting) — Waterbury

Buttons
B Schwanda & Sons — Staffordville
Colt's Manufacturing Company — Hartford
L C White Company The — Waterbury
Frank Parizek Manufacturing Co The — West Willington
Patent Button Co The — Waterbury
Scovill Manufacturing Company (Uniform and Tack Fasteners) — Waterbury 91
Waterbury Companies Inc — Waterbury

Cabinets
Charles Parker Co The (medicine) — Meriden

Cabinet Work
Hartford Builders Finish Co — Hartford

Cable—Asbestos Insulated
Rockbestos Products Corp — New Haven

Cable—BX Armored
General Electric Company — Bridgeport

Cable—Nonmetallic Sheathed
General Electric Company — Bridgeport

Cable—Service Entrance
General Electric Company — Bridgeport

Cages
Andrew B Hendryx Co The (bird and animal) — New Haven

Cams
Hartford Special Machinery Co The — Hartford
Rowbottom Machine Company Inc — Waterbury

Canvas Products
F B Skiff Inc — Hartford

Capacitors
Electro Motive Mfg Co Inc The (mica & trimmer) — Willimantic

Card Clothing
Standard Card Clothing Co The (for textile mills) — Stafford Springs

Carpenter's Tools
Sargent & Company (Planes, Squares, Plumb Bobs, Bench Screws, Clamps and Saw Vises) — New Haven

Carpets and Rugs
Bigelow-Sanford Carpet Co — Thompsonville

Carpet Lining
Palmer Brothers Co — Fitchville

Casket Trimmings
Bridgeport Casket Hardware Co The

Casters
Bassick Company The (Industrial and General) — Bridgeport

Casters—Industrial
George P Clark Co — Windsor Locks

Castings
Bradley & Hubbard Mfg Co The (grey iron, brass, bronze, aluminum) — Meriden
Charles Parker Co The (gray iron) — Meriden
Eastern Malleable Iron Company The (malleable iron, Z metal and alloy) — Naugatuck
Gillette-Vibber The (grey iron, brass, bronze, aluminum, also Bronze Bushing Stock) — New London
John M Russell Mfg Co Inc (brass, bronze and aluminum) — Naugatuck
Malleable Iron Fittings Co (malleable iron and steel) — Branford

Castings (continued)
McLagon Foundry Co (gray iron) — New Haven
Newton-New Haven Co (zinc and aluminum) 688 Third Ave — West Haven
Philbrick-Booth & Spencer Inc (grey iron) — Hartford
Scovill Manfacturing Company (Brass & Bronze) — Waterbury 91
Sessions Foundry Co The (gray iron) — Bristol
Union Mfg Co (gray iron & semi steel) — New Britain
Waterbury Foundry Company The (highway & sash weights) — Waterbury
Wilcox Crittenden & Co Inc (gray iron and brass) — Middletown

Castings—Permanent Mould
Bradley & Hubbard Mfg Co The (zinc and aluminum) — Meriden

Centrifugal Blower Wheels
Torrington Manufacturing Co The — Torrington

Chain
John M Russell Mfg Co Inc — Naugatuck

Chain—Welded and Weldless
Bridgeport Chain & Mfg Co — Bridgeport

Chain—Bead
Bead Chain Mfg Co The — Bridgeport

Chartered Coach Service
Connecticut Company The (excursions a specialty) — New Haven

Chemicals
American Cynamid & Chemical Corp — Waterbury
Apothecaries Hall Co — Waterbury
Edcan Laboratories — South Norwalk
Macalaster Bicknell Company — New Haven
MacDermid Incorporated — Waterbury
Naugatuck Chemical Division United States Rubber Co — Naugatuck

Chemicals—Agricultural
Naugatuck Chemical Division United States Rubber Co (insecticides, fungicides, weed killers) — Naugatuck

Chemicals—Aromatic
Naugatuck Chemical Division United States Rubber Co — Naugatuck

Cherries
John Magee & Co Incorporated — Saybrook

Chromium Plating
Chromium Corp of America — Waterbury
Chromium Process Company The — Shelton
Nutmeg Chrome Corporation — Hartford

Chucks
Cushman Chuck Co The — Hartford

Chucks & Face Plate Jaws
Union Mfg Co — New Britain

Chucks—Power Operated
Cushman Chuck Co The — Hartford

Clay
Howard Company (Fire Howard "B" and High Temperature Dry) — New Haven

Cleansing Compounds
MacDermid Incorporated — Waterbury

Clock Mechanisms
Lux Clock Mfg Co The — Waterbury

Clocks
E Ingraham Co The — Bristol
Seth Thomas Clocks — Thomaston
United States Time Corporation The — Waterbury

Clocks—Alarm
Lux Clock Mfg Co The — Waterbury
New Haven Clock and Watch Co The (spring & electric) — New Haven
William L Gilbert Clock Corporation The — Winsted

Clocks—Automatic Cooking
Lux Clock Mfg Co The — Waterbury

Clutches
Snow-Nabstedt Gear Corp The — New Haven

Clutch Facings
Russell Mfg Co The — Middletown

Clutch—Friction
Raybestos Div of Raybestos-Manhattan Inc The (clutch facings—molded, woven, fabric, metallic) — Bridgeport

Coffee Makers
General Electric Company — Bridgeport

Coils—Pipe or Tube
National Pipe Bending Co The 160 River St — New Haven

Comfortables
Palmer Brothers Co — Fitchville

Commercial Heat Treating
A F Holden Company The 52 Richard St — West Haven

Communication Equipment
Airadio Incorporated (aircraft, marine, intra-facility) — Stamford

Compressors
Norwalk Company Inc (high pressure air and gas) — South Norwalk

Concrete Products
Plasticrete Corp — Hamden

Condensers
Airadio Incorporated (variable) — Stamford

Cones
Sonoco Products Co (Climax-Lowell Div) (Paper) — Mystic

Consulting Engineers
Stanley P Rockwell Co Inc The (Consulting) 296 Homestead Ave — Hartford

Contract Machining
Malleable Iron Fittings Company — Branford

Contract Manufacturers
Greist Mfg Co The (metal parts and assemblies) 503 Blake St — New Haven
Merriam Mfg Co (production runs—metal boxes and containers to specifications) — Durham
Plume & Atwood Mfg Co The (metal parts & assemblies) — Waterbury
Scovill Manufacturing Company (Metal Parts and Assemblies) — Waterbury 91
Waterbury Companies Inc — Waterbury

Controllers
Bristol Company The — Waterbury
Manning Maxwell & Moore Inc — Bridgeport

Conveyor Systems
Leeds Electric and Mfg Co The — Hartford

Copper
American Brass Co The (sheet, wire, rods tubes) — Waterbury
Bristol Brass Corp The (sheet) — Bristol
Chase Brass & Copper Co (sheet, rod, wire. tube) — Waterbury
Thinsheet Metals Co The (sheets and rolls) — Waterbury

Copper Sheets
New Haven Copper Co The — Seymour

Copper Shingles
New Haven Copper Co The — Seymour

Copper Water Tube
Bridgeport Brass Co — Bridgeport

Cords—Asbestos
General Electric Company — Bridgeport

Cords—Braided
General Electric Company — Bridgeport

Cords—Heater
General Electric Company — Bridgeport

Cords—Portable
General Electric Company — Bridgeport

Cord Sets
General Electric Company — Bridgeport

Cork Cots
Sonoco Products Co (Climax-Lowell Div) — Mystic

Corrugated Box Manufacturers
Connecticut Container Corporation — Wallingford
Danbury Square Box Co The — Danbury

Corrugated Shipping Cases
Connecticut Corrugated Box Div Robert Gair Co Inc — Portland
D L & D Container Corp 87 Shelton Ave — New Haven

Cosmetic Containers
Eyelet Specialty Co The — Waterbury
Plume & Atwood Mfg Co The (metal) — Waterbury

Cosmetics
J B Williams Co The — Glastonbury
Northam Warren Corporation — Stamford

Cotton Batting & Jute Batting
Palmer Brothers Co — Fitchville

Cotton Yarn
Floyd Cranska Co The — Moosup

Counting Devices
Veeder-Root Inc — Hartford

Cut Stone
Dextone Co The — New Haven

Cutters
American Standard Co (special) — Plantsville
Barnes Tool Company The (pipe cutters, hand) — New Haven
O K Tool Co Inc The (inserted tooth milling) 33 Hull St — Shelton
Standard Machinery Co The (rotary board, single and duplex) — Mystic

Delayed Action Mechanism
M H Rhodes Inc — Hartford
R W Cramer Company Inc The — Centerbrook

Dental Gold Alloys
J M Ney Company The — Hartford

Diamonds—Industrial
Diamond Tool and Die Works — Hartford

Dictating Machines
Dictaphone Corporation — Bridgeport
Gray Manufacturing Company The — Hartford
Soundscriber Corporation The — New Haven

Die & Tool Makers
Parsons Tool Inc — New Britain

Die Castings
Newton-New Haven Co Inc 688 Third Ave — West Haven

Die Casting Dies
ABA Tool & Engineering Co — Manchester
Parker Stamp Works Inc The — Hartford
Weimann Bros Mfg Co The — Derby

Die Castings (Aluminum & Zinc)
Corbin Cabinet Lock Div American Hardware Corp — New Britain

(Advt.)

Die-Heads—Self Opening
Eastern Machine Screw Corp The Truman & Barclay Sts New Haven
Geometric Tool Co The New Haven

Dies
American Standard Co Plantsville
Hoggson & Pettis Mfg Co The 141 Brewery St New Haven
Parker Stamp Works Inc The (for plastics and die castings) Hartford

Dies and Die Sinking
Consolidated Industries West Cheshire

Dish Washing Machines
Colt's Manufacturing Company Hartford

Disk Harrows
Orkil Inc—Cutaway Harrow Division Higganum

Displays
Sawyer Display Corp Stamford

Door Closers
P & F Corbin Division The American Hardware Corp New Britain
Sargent & Company New Haven
Yale & Towne Manufacturing Company The Stamford

Dowel Pins
Allen Manufacturing Co The Hartford

Drafting Accessories
Joseph Merritt & Co Hartford

Draperies
Palmer Brothers Co Fitchville

Drilling Machines
Henry & Wright Manufacturing Company The (sensitive) Hartford

Drop Forgings
Atwater Mfg Co Plantsville
Blakeslee Forging Co The Plantsville
Bridgeport Hdwe Mfg Corp The Bridgeport
Capewell Mfg Company Hartford
Consolidated Industries West Cheshire
Wilcox Crittenden & Co Inc Middletown

Druggists' Rubber Sundries
Seamless Rubber Company The New Haven

Dust Collecting Systems
Connecticut Blower Company Plainville

Edged Tools
Collins Co The (axes and other edged tools) Collinsville

Elastic Braid
Ansonia O & C Co Ansonia

Elastic Webbing
Ansonia O & C Co Ansonia
Russell Mfg Co The Middletown

Electric Appliances
General Electric Company Bridgeport
Silex Co The 80 Pliny St Hartford

Electric Cables
Rockbestos Products Corp (asbestos insulated) New Haven

Electric Circuit Breakers
Trumbull Electric Mfg Co The Plainville

Electric—Commutators & Segments
Cameron Elec Mfg Co The (rewinding motors) Ansonia

Electric Cord & Cord Sets
Accurate Insulated Wire Corp New Haven

Electric Cords
Rockbestos Products Corp (asbestos insulated) New Haven

Electric Eye Control
United Cinephone Corporation Torrington

Electric Fixture Wire
Rockbestos Products Corp (asbestos insulated) New Haven

Electric Hand Irons
Winsted Hardware Mfg Co (trade mark "Durabilt") Winsted

Electric Insulation
Case Brothers Inc Manchester
Rogers Corporation The Manchester

Electric Knife Switches
Gregory Manufacturing Co Inc The New Haven

Electric Lighting Fixtures
Plume & Atwood Mfg Co The Waterbury

Electrical Outlet and Switch Boxes, and Covers
General Electric Company Bridgeport

Electric Panel Boards
Federal Electric Products Co Inc Hartford
Trumbull Electric Mfg Co The Plainville

Electric Safety Switches
Federal Electric Products Co Inc Hartford
Trumbull Electric Mfg Co The Plainville

Electric Signs
United Advertising Corp New Haven

Electric Specialties
Gregory Manufacturing Co Inc The New Haven

Electric Time Controls
R W Cramer Company Inc The Centerbrook

Electric Timepieces
New Haven Clock and Watch Co The (automobile and alarm) New Haven

Electric Wire
Rockbestos Products Corp (asbestos insulated) New Haven

Electrical Circuit Breakers
Federal Electric Products Co Inc Hartford

Electrical Conduit Fittings & Grounding Specialties
Gillette-Vibber Company The New London

Electrical Control Apparatus
Federal Electric Products Co Inc Hartford
Trumbull Electric Mfg Co The Plainville

Electrical Goods
A C Gilbert Co New Haven

Electrical Motors
U S Electrical Motors Inc Milford

Electrical Recorders
Bristol Co The Waterbury

Electrical Relays and Controls
Allied Control Co Plantsville

Electronic Equipment
Airadio Incorporated Stamford

Electronics
Crystal Research Laboratories Inc Hartford
Gray Manufacturing Company The Hartford
United Cinephone Corporation Torrington

Electroplating
National Sherardizing & Machine Co Hartford
Waterbury Plating Company Waterbury

Electroplating—Equipment & Supplies
Enthone Inc New Haven
MacDermid Incorporated Waterbury

Electro Plating Processes & Supplies
United Chromium Incorporated Waterbury

Electrotypes
W T Barnm & Co Inc (all classes) New Haven

Elevators
Eastern Machinery Co The (passenger and freight) New Haven
General Elevator Service Co Hartford

Enameling
Conn Metal Finishing Co Hamden
Leeds Electric and Mfg Co The (including wrinkle finishes) Hartford
Waterbury Plating Company Waterbury

Enameling and Finishing
Clairglow Mfg Co Portland

Engines
Pratt & Whitney Aircraft Div United Aircraft Corp (aircraft) East Hartford
Wolverine Motor Works Inc (diesel stationary marine) Bridgeport

Envelopes
Curtis 1000 Inc Hartford
United States Envelope Company, Hartford Division Hartford

Exhibits
Sawyer Display Corp Stamford

Extractors—Tap
Walton Company The West Hartford

Eyelets
L C White Company The Waterbury
Platt Bros & Co The P O Box 1030 Waterbury
Scovill Manufacturing Company Waterbury 91
Waterbury Companies Inc Waterbury

Fans—Electric
General Electric Company Bridgeport

Fasteners—Slide & Snap
G E Prentice Mfg Co The Kensington
Scovill Manufacturing Company (Snap) Waterbury 91

Felt
Auburn Manufacturing Company The (mechanical, cut parts) Middletown

Felt—All Purpose
American Felt Co (Mills & Cutting Plant) Glenville
Chas W. House & Sons Inc (Mills & Cutting Plant) Unionville

Ferrules
Waterbury Companies Inc Waterbury

Fibre Board
Case Brothers Inc Manchester
C H Norton Co The North Westchester
Rogers Corporation (Specialty) Manchester

File Cards
Standard Card Clothing Co The Stafford Springs

Film Spools
Watkins Manufacturing Co Inc Milford

Finger Nail Clippers
H C Cook Co The 32 Beaver St Ansonia

Firearms
Colt's Manufacturing Company Hartford
Remington Arms Co Inc Bridgeport
Winchester Repeating Arms Company Division Olin Industries Inc New Haven

Fire Hose
Fabrics Fire Hose (municipal and industrial) Sandy Hook

Fireplace Goods
American Windshield & Specialty Co The 881 Boston Post Road Milford
John P Smith Co The (screens) 423-33 Chapel St New Haven

Fireproof Floor Joists
Dextone Co The New Haven

Fireworks
M Backes' Sons Inc Wallingford

Fishing Tackle
Bevin-Wilcox Line Co The (lines) East Hampton
H C Cook Co The 32 Beaver St Ansonia
Horton Mfg Co The (reels, rods, lines) Bristol
Jim Harvey Div Local Industries Inc (nets, lures) Lakeville

Flashlights
Winchester Repeating Arms Company Division Olin Industries Inc New Haven

Flashlights and Radio Batteries
Wichester Repeating Arms Company Division Olin Industries Inc New Haven

Floor & Ceiling Plates
Beaton & Cadwell Mfg Co The New Britain
Gaynor Electric Company Inc Bridgeport

Fluorescent Lighting Equipment
Vanderman Manufacturing Co The Willimantic
Wiremold Company The Hartford

Food Mixers—Electric
General Electric Company Bridgeport

Forgings
Clark Brothers Bolt Co Milldale
Heppenstall Co (all kinds and shapes) Bridgeport
Scovill Manufacturing Company (Non-ferrous) Waterbury 91

Foundries
Sessions Foundry Co The (iron) Bristol
Union Mfg Co (gray iron & semi steel) New Britain
Wilcox Crittenden & Co Inc (iron, brass, aluminum and bronze) Middletown

Foundry Riddles
John P Smith Co The 423-33 Chapel St New Haven
Rolock Inc (brass, galvanized, steel) Southport

Furnaces
Norwalk Airconditioning Corp The (warm air oil fired) South Norwalk
W S Rockwell Company (Industrial) Fairfield

Furnace Linings
Mullite Refractories Co The Shelton

Furniture Pads
Gilman Brothers Company The Gilman

Fuse Blocks
Gregory Manufacturing Co Inc The New Haven

Fuses—Plug and Cartridge
General Electric Company Bridgeport

Gage Blocks
Fonda Gage Company (Fonda lifetime-carbide and steel) Stamford

Galvanizing
Malleable Iron Fittings Co Branford
Wilcox Crittenden & Co Inc Middletown

Galvanizing & Electrical Plating
Gillette-Vibber Co The New London

Gaskets
Auburn Manufacturing Company The (from all materials) Middletown
Raybestos Div of Raybestos-Manhattan Inc The Bridgeport

Gauges
American Standard Co Plantsville
Bristol Co The (pressure and vacuum—recording automatic control) Waterbury
Fonda Gage Company (special) Stamford
Helicoid Gage Division American Chain & Cable Co Inc Bridgeport
Manning Maxwell & Moore Inc Bridgeport

Gears and Gear Cutting
Hartford Special Machinery Co The Hartford

Glass and China
Rockwell Silver Co The (silver decorated) Meriden

Glass Blowing
Macalaster Bicknell Company New Haven

Glass Coffee Makers
Silex Co The 80 Pliny St Hartford

Glass Cutters
Fletcher Terry Co The Box 415 Forestville

Glass Processing
Woodbury Glass Company Inc Box 8 East Hartford

Golf Equipment
Horton Mfg Co The (clubs, shafts, balls, bags) Bristol

Governors
Pickering Governor Co The (speed regulating, centrifugal, hydraulic) Portland

(Advt.)

Greeting Cards
A D Steinback & Sons Inc — New Haven

Grinding
Centerless Grinding Co Inc The (Precision custom grinding; centerless, cylindrical, surfaces, internal and special) 19 Staples St — Bridgeport
Hartford Special Machinery Co The (gears, threads, cams and splines) — Hartford

Grinding Machines
Rowbottom Machine Company Inc (cam) — Waterbury

Hand Tools
Bridgeport Hdwe Mfg Corp The (nail pullers, scout axes, box opening tools, trowels, coping saws, putty knives) — Bridgeport
James J Ryan Tool Works The (screw drivers, machinists' punches, cold chisels, scratch awls and nail sets) — Southington
Peck Stow & Wilcox Co The (Bit braces, chisels, dividers, draw knives, hammers, pliers, squares, snips, wrenches) — Southington

Hardware
Bassick Company The (Automotive) — Bridgeport
P & F Corbin Division The American Hardware Corp (Builders) — New Britain
Sargent & Company — New Haven
Wilcox Crittenden & Co Inc (marine heavy and industrial) — Middletown
Yale & Towne Manufacturing Company The (builders) — Stamford

Hardware—Marine & Bus
Rostand Mfg Co The — Milford

Hardware—Trailer Cabinet
Excelsior Hardware Co The — Stamford

Hardware, Trunk & Luggage
Corbin Cabinet Lock Div American Hardware Corp — New Britain
J H Sessions & Son — Bristol
Yale & Towne Manufacturing Company The — Stamford

Hat Machinery
Doran Bros Inc — Danbury

Health, Surgical & Orthopedic Supports
Berger Brothers Company The (custom made for back, breast and abdomen) — New Haven

Heat Treating
A F Holden Co The 52 Richard St — West Haven
Bennett Metal Treating Co The 1945 New Britain Ave — Elmwood
Driscoll Wire Company The — Shelton
New Britain-Gridley Machine Division The New Britain Machine Co — New Britain
Stanley P Rockwell Co Inc The 296 Homestead Ave — Hartford

Heat-Treating Equipment
A F Holden Company The 52 Richard Street — West Haven (Main Plant)
Autoyre Company The — Oakville
Stanley P Rockwell Co Inc The (commercial) 2996 Homestead Ave — Hartford
Wallace Barnes Co The Div Associated Spring Corp — Bristol

Heat Treating Salts and Compounds
A F Holden Company The 52 Richard Street — West Haven
Mitchell-Bradford Chemical Co — Bridgeport

Heating Apparatus
Miller Company The (domestic oil burners and heating devices) — Meriden

Heavy Chemicals
Naugatuck Chemical Division United States Rubber Co (sulphuric, nitric and muriatic acids and aniline oil) — Naugatuck

Hex-Socket Screws
Bristol Company The — Waterbury

Highway Guard Rail Hardware
Malleable Iron Fittings Co — Branford

Hinges
Homer D Bronson Company — Beacon Falls

Hobs and Hobbings
ABA Tool & Engineering Co — Manchester

Hoists and Trolleys
Union Mfg Company — New Britain

Home Laundry Equipment
General Electric Company — Bridgeport

Hose Supporters
Ansonia O & C Co — Ansonia

Hose Supporter Trimmings
Hawie Mfg Co The (So-Lo Grip Tabs) — Bridgeport

Hospital Signal Systems
Connecticut Telephone & Electric Division of Great American Industries Inc — Meriden

Hot Water Heaters
Petroleum Heat & Power Co (Instantaneous domestic oil burner) — Stamford

Hydraulic Brake Fluids
Eis Manufacturing Co — Middletown

Industrial Finishes
Chemical Coatings Corporation — Rocky Hill
United Chromium Incorporated — Waterbury
Zapon Div Atlas Powder Co — Stamford

Industrial and Marking Tapes
Seamless Rubber Company The — New Haven

Industrial Refrigeration
Bowser Inc Refrigeration Division (Specialists) — Terryville

Infra-Red Equipment
Leeds Electric and Mfg Co The — Hartford

Insecticides
American Cyanamid & Chemical Corp — Waterbury
Darworth Incorporated ("Coracide" DDT Dispenser) — Simsbury

Insecticide Bomb
Bridgeport Brass Company (Aer°a°sol) — Bridgeport

Insulated Wire Cords & Cable
Kerite Insulated Wire & Cable Co Inc The — Seymour

Instruments
Bristol Company The — Waterbury
J-B-T Instruments Inc (Electrical and Temperature) — New Haven

Insulation
Gilman Brothers Co The — Gilman

Insulating Refractories
Mullite Refractories Co The — Shelton

Insulatitng Tape
Ansonia O & C Co — Ansonia

Inter-Communications Equipment
Connecticut Telephone & Electric Division of Great American Industries Inc — Meriden

Ironing Machines—Electric
General Electric Company — Bridgeport

Jacquard
Case Brothers Inc — Manchester

Japanning
J H Sessions & Son — Bristol

Jig Borer
Moore Special Tool Co (Moore) — Bridgeport

Jig Boring
American Standard Co — Plantsville
Parsons Tool Inc — New Britain

Jig Grinder
Moore Special Tool Co (Moore) — Bridgeport

Jigs and Fixtures
American Standard Co — Plantsville

Jointing
Raybestos Div of Raybestos-Manhattan Inc The (compressed sheet) — Bridgeport

Key Blanks
Corbin Cabinet Lock Div American Hardware Corp — New Britain
Graham Mfg Co The — Derby
Sargent & Company — New Haven
Yale & Towne Manufacturing Company The — Stamford

Labels
I & J Cash Inc (Woven) — South Norwalk
Naugatuck Chemical Division United States Rubber Co (for rubber articles) — Naugatuck

Label Moisteners
Better Packages Inc — Shelton

Laboratory Equipment
Bowser Inc Refrigeration Division — Terryville
Eastern Industries Inc — New Haven

Laboratory Supplies
Macalaster Bicknell Company — New Haven

Lacquers & Synthetic Enamels
Chemical Coatings Corporation — Rocky Hill
United Chromium Incorporated — Waterbury
Zapon Div Atlas Powder Co — Stamford

Ladders
A W Flint Co 196 Chapel St — New Haven

Lamps
Plume & Atwood Mfg Co The (metal oil) — Waterbury

Lampholders—Incandescent and Fluorescent
General Electric Company — Bridgeport

Lamp Shades
Verplex Company The — Essex

Lathes
Bullard Company The (vertical turret cutmaster and Mult-Au-Matic, vertical multi-spindle) — Bridgeport

Leather
Herman Roser & Sons Inc (Genuine Pigskin) — Glastonbury
Geo A Shepard & Sons Co The (sheepskin, shoe upper, garment, grain and suede) — Bethel

Leather Dog Furnishings
Andrew B Hendryx Co The — New Haven

Leather Goods Trimmings
G E Prentice Mfg Co The — Kensington

Leather, Mechanical
Auburn Manufacturing Company The (packings, cubs, washers, etc.) — Middletown

Letterheads
Lehman Brothers Inc (designers, engravers, lithographers) — New Haven

Lighting Accessories—Fluorescent
General Electric Company — Norfolk

Lights—Trouble
General Electric Company — Bridgeport

Lighting Equipment
Miller Co The (Miller, Duplexalite, Ivanhoe) — Meriden
Waterbury Companies Inc — Waterbury

Lightning Protection
Edward H Brown — Hartford & New Haven

Lithographing
Kellogg & Bulkeley A Division of Connecticut Printers Inc — Hartford
New Haven Printing Company The — New Haven

Locks—Banks
Yale & Towne Manufacturing Company The — Stamford

Locks—Builders
P & F Corbin Division The American Hardware Corp — New Britain
Sargent & Company — New Haven
Yale & Towne Manufacturing Company The — Stamford

Locks—Cabinet
Corbin Cabinet Lock Div American Hardware Corp — New Britain
Excelsior Hardware Co The — Stamford
Yale & Towne Manufacturing Company The — Stamford

Locks—Special Purpose
Yale & Towne Manufacturing Company The — Stamford

Locks—Suit-Case and Trimmings
Corbin Cabinet Lock Div American Hardware Corp — New Britain
Excelsior Hardware Co The — Stamford

Locks—Trunk
Yale & Towne Manufacturing Company The — Stamford
Excelsior Hardware Co The — Stamford
Yale & Towne Manufacturing Company The (and suitcase) — Stamford

Locks—Zipper
Excelsior Hardware Co The — Stamford

Loom—Non-Metallic
Wiremold Company The — Hartford

Luggage Fabric
Falls Company The — Norwich

Lumber & Millwork Products
City Lumber Co of Bridgeport Inc — Bridgeport

Machinery
Fenn Manufacturing Company The (Special) — Hartford
Globe Tapping Machine Company (dial type drilling and tapping) — Bridgeport
Hallden Machine Company The (mill) — Thomaston
Peck Stow & Wilcox Co The (Machines & tools for sheet metal fabrication—manually & power operated) — Southington

Machinery (Continued)
Standard Machinery Co The (bookbinders) — Mystic
Torrington Manufacturing Co The (mill) — Torrington

Machine Bases
State Welding Co The (Fabricated Steel & Salvage of Broken Castings) — Hartford

Machine Work
Fenn Manufacturing Company The (precision parts) — Hartford
Grandahl Tool and Machine Company — Hartford
Hartford Special Machinery Co The (contract work only) — Hartford
National Sherardizing & Machine Co (job) — Hartford
Parker Stamp Works Inc The (Special) — Hartford
Swan Tool & Machine Co The — Hartford
Torrington Manufacturing Co The (special rolling mill machinery) — Torrington

Machines
Campbell Machine Div American Chain & Cable Co Inc (cutting & nibbling) — Bridgeport
Patent Button Company The — Waterbury
Special Devices Inc (Special, new developments, engineering, design and construction) — Berlin

Machines—Automatic
A H Nilson Mach Co The (Special) — Bridgeport

Machines—Automatic Chucking
New Britain-Gridley Machine Division The New Britain Machine Co (multiple spindle and double end) — New Britain

Machines—Automatic Screw
New Britain-Gridley Machine Division The New Britain Machine Co (single and multiple spindle) — New Britain

Machines—Forming
A H Nilson Mach Co The (four-slide wire and ribbon stock) — Bridgeport

Machines—Paper Ruling
John McAdams & Sons Inc — Norwalk

Machines—Precision Boring
New Britain-Gridley Machine Division The New Britain Machine Co — New Britain

(Advt.)

Machines—Slotting
Waterbury Farrel Foundry & Machine Co The (screw head) Waterbury

Machines—Thread Rolling
Waterbury Farrel Foundry & Machine Co The Waterbury

Machines—Well Drilling
Consolidated Industries West Cheshire

Machinery—Bolt and Nut
Waterbury Farrel Foundry & Machine Co The Waterbury

Machinery—Cold Heading
Waterbury Farrel Foundry & Machine Co The Waterbury

Machinery Dealers & Rebuilders
Botwinik Brothers New Haven
J L Lucas and Son Fairfield

Machinery—Metal-Working
Bristol Metal-working Equipment Hartford
Waterbury Farrel Foundry & Machine Co The Waterbury

Machinery—Nut
Waterbury Farrel Foundry & Machine Co The (forming and tapping) Waterbury

Machinery—Screw and Rivet
Waterbury Farrel Foundry & Machine Co The Waterbury

Machinery—Wire Drawing
Waterbury Farrel Foundry & Machine Co The Waterbury

Mail Boxes, Apartment & Residential
Corbin Cabinet Lock Div American Hardware Corp New Britain

Mailing Machines
Pitney-Bowes Inc Stamford

Manganese Bronze Ingot
Whipple and Choate Company Bridgeport

Marine Engines
Kilborn-Sauer Company (running lights and searchlights) Fairfield
Lathrop Engine Co The Mystic

Marine Equipment
Wilcox Crittenden & Co Inc Middletown

Marine Reverse Gears
Snow-Nabstedt Gear Corp The New Haven

Marking Devices
Hoggson & Pettis Mfg Co The New Haven
Parker Stamp Works Inc The (steel) Hartford

Matrices
W T Barnum & Co Inc New Haven

Mattresses
Palmer Brothers Co Fitchville
Waterbury Mattress Co Waterbury

Mechanical Assemblies—Small
M H Rhodes Inc Hartford

Mechanical Specialties
Gregory Manufacturing Co Inc The New Haven

Mechanics Hand Tools
Bridgeport Hdwe Mfg Corp The (screw drivers, wrenches, pliers, cold chisels, hammers, auto repair tools) Bridgeport

Metal Cleaners
Apothecaries Hall Co Waterbury
MacDermid Incorporated Waterbury

Metal Cleaning Machines
Colt's Manufacturing Company Hartford

Metal Finishes
Mitchell-Bradford Chemical Co Bridgeport
United Chromium Incorporated Waterbury

Metal Finishing
National Sherardizing & Machine Co Hartford
Waterbury Plating Company Waterbury

Metal Goods
Waterbury Companies Inc (to order) Waterbury

Metallizing
Conn Metal Finishing Co Hamden

Metal Novelties
H C Cook Co The 32 Beaver St Ansonia
Waterbury Companies Inc Waterbury

Metal Products
State Welding Company The Hartford

Metal Products—Stampings
J H Sessions & Son Bristol
Scovill Manufacturing Company (Made-to-Order) Waterbury 91
Waterbury Companies Inc Waterbury

Metal Specialties
Excelsior Hardware Co The Stamford

Metal Stampings
Autoyre Co The (Small) Oakville
Bridgeport Chain & Mfg Co Bridgeport
DooVal Tool & Mfg Inc The Naugatuck
Excelsior Hardware Co The Stamford
Grandahl Tool and Machine Company Hartford
Greist Mfg Co The 503 Blake St New Haven
Hayes Metal Stampings Inc Hartford
H C Cook Co The 32 Beaver St Ansonia
J A Otterbein Company The (metal fabrications) Middletown
J H Sessions & Son Bristol
Patent Button Co The Waterbury

Metal Stampings (continued)
G E Prentice Mfg Co The Kensington
Saling Manufacturing Company Unionville
Scovill Manufacturing Company Waterbury 91
Stanley Works The New Britain
Swan Tool & Machine Co The Hartford
Verplex Company The (Contract) Essex
Waterbury Companies Inc Waterbury

Meters—Gas
Sprague Meter Company Bridgeport

Microscope—Measuring
Lundeberg Engineering Company Hartford

Milk Bottle Carriers
John P Smith Co The 423-33 Chapel St New Haven

Millwork
Hartford Builders Finish Co Hartford

Millboard
Raybestos Div of Raybestos-Manhattan Inc The (asbestos) Bridgeport

Milling Machines
Rowbottom Machine Company Inc (cam) Waterbury

Mill Supplies
Wilcox Crittenden & Co Inc Middletown

Minute Minders
Lux Clock Mfg Co The Waterbury

Mixing Equipment
Eastern Industries Inc New Haven

Monuments
Beij & Williams Co The Hartford

Motor Switches
Gaynor Electric Company Inc Bridgeport

Moulded Plastic Products
Colt's Manufacturing Company Hartford
Patent Button Co The Waterbury
Waterbury Companies Inc Waterbury
Watertown Mfg Co The 117 Echo Lake Road Watertown

Mouldings
Himmel Brothers Co The (architectural, metal and store front) Hamden

Moulds
ABA Tool & Engineering Co Manchester
Hoggson & Pettis Mfg Co The (steel) 114 Brewery St New Haven
Lundeberg Engineering Company (plastic) Hartford
Parker Stamps Works Inc The (compression, injection & transfer for plastics) Hartford
Sessions Foundry Co The (heat resisting for non-ferrous metals) Bristol

Napper Clothing
Standard Card Clothing Co The (for textile mills) Stafford Springs

Nickel Anodes
Apothecaries Hall Co Waterbury
Seymour Mfg Co The Seymour

Nickel Silver
Plume & Atwood Mfg Co The Thomaston
Seymour Mfg Co The Seymour
Waterbury Rolling Mills Inc (sheets, strips, rolls) Waterbury

Nickel Silver Ingot
Whipple and Choate Company The Bridgpeort

Night Latches
P & F Corbin Division The American Hardware Corp New Britain
Sargent & Company New Haven
Yale & Towne Manufacturing Company The Stamford

Non-ferrous Metal Castings
Miller Company The Meriden

Nuts, Bolts and Washers
Clark Brothers Bolt Co Milldale

Office Equipment
Pitney-Bowes Inc Stamford
Underwood Corporation Bridgeport & Hartford

Offset Printing
Kellogg & Bulkeley A Division of Connecticut Printers Inc Hartford
New Haven Printing Company The New Haven

Oil Burners
Malleable Iron Fittings Co (domestic) Branford
Miller Company The (domestic) Meriden
Petroleum Heat & Power Co (domestic, commercial and industrial) Stamford
Silent Glow Oil Burner Corp The 1477 Park St Hartford
W S Rockwell Company (Industrial) Fairfield

Oil Burner Wick
Raybestos Div of Raybestos-Manhattan Inc The Bridgeport

Oil Tanks
Norwalk Tank Co The (550 to 30 M gals., underwriters above and under ground) South Norwalk

Olives
John Magee & Co Incorporated Saybrook

Optical Cores & Ingots
Plume & Atwood Mfg Co The Thomaston

Outlets—Electric
General Electric Company Bridgeport

Ovens
American Machine & Foundry Co New Haven
W S Rockwell Company (Industrial) Fairfield

Package Sealers
Better Packages Inc Shelton

Packing
Auburn Manufacturing Company The (leather, rubber, asbestos, fibre) Middletown
Raybestos Div of Raybestos-Manhattan Inc The (rubber sheet and automotive) Bridgeport

Padlocks
Corbin Cabinet Lock Div American Hardware Corp New Britain
Sargent & Company New Haven
Yale & Towne Manufacturing Company The Stamford

Painting—Infra Red Baking
Grandahl Tool and Machine Company Hartford

Paints and Enamels
Staminte Corp The New Haven
Tredennick Paint Mfg Co The Meriden

Panta
Moore Special Tool Co (crush wheel dresser) Bridgeport

Paperboard
Connecticut Corrugated Box Div Robert Gair Co Inc Portland
New Haven Pulp & Board Co The New Haven
Robertson Paper Box Co Montville

Paper Boxes
Atlantic Carton Corp (folding) Norwich
National Folding Box Co Inc (folding) New Haven
New Haven Pulp & Board Co The New Haven
Robertson Paper Box Co (folding) Montville

Paper Boxes—Folding and Setup
Bridgeport Paper Box Company Bridgeport
M Backes' Sons Inc Wallingford
Warner Brothers Company The Bridgeport

Paper Clips
H C Cook Co The (steel) 32 Beaver St Ansonia

Paper Tubes and Cores
Sonoco Products Co (Climax-Lowell Div) Mystic

Parallel Tubes
Sonoco Products Co (Climax-Lowell Div) Mystic

Parkerizing
Clairglow Mfg Company Portland

Passenger Transportation
Connecticut Company The (local, suburban and interurban) New Haven

Pet Furnishings
Andrew B Hendryx Co The New Haven

Pharmaceutical Specialties
Ernst Bischoff Company Inc Ivoryton

Phosphor Bronze
Miller Company The (sheets, strips, rolls) Meriden
Seymour Mfg Co The Seymour
Waterbury Rolling Mills Inc (sheets, strips, rolls) Waterbury

Phosphor Bronze Ingots
Whipple and Choate Company The Bridgeport

Photographic Equipment
Kalart Company Inc Stamford

Photo Reproduction
New Haven Printing Company The New Haven

Piano Repairs
Pratt Read & Co Inc (keys and action) Ivoryton

Piano Supplies
Pratt Read & Co (keys and actions, backs, plates) Ivoryton

Pickles
Goodman Brothers Meriden

Pin Up Lamps
Verplex Company The Essex

Pipe
American Brass Co The (brass and copper) Waterbury
Bridgeport Brass Co (brass & copper) Bridgeport
Chase Brass & Copper Co (red brass and copper) Waterbury
Crane Company (fabricated) Bridgeport
Howard Co (cement well and chimney) New Haven

Pipe Fittings
Corley Co Inc The (300# AAR) Plainville
Malleable Iron Fittings Co Branford

Pipe Plugs
Holo-Krome Screw Corporation The (countersunk) West Hartford

Plastics
Naugatuck Chemical Division United States Rubber Co Naugatuck

Plastic Buttons
Colt's Manufacturing Company Hartford
Frank Parizek Manufacturing Co The West Willington
Patent Button Co The Waterbury
Waterbury Companies Inc Waterbury
(Advt.)

Plastic Film Printing
Glasgo Finishing Co The — Glasgo

Plastic Gems
Colt's Manufacturing Company — Hartford

Plastic—Moulders
Colt's Manufacturing Company — Hartford
Conn Plastics — Waterbury
General Electric Company — Meriden
Geo S Scott Mfg Co The — Wallingford
Watertown Mfg Co The — Watertown
Waterbury Companies Co — Waterbury

Plastics—Moulds & Dies
Parker Stamp Works Inc The (for plastics) — Hartford

Plasticrete Bloc
Plasticrete Corp — Hamden

Plates—Switch
General Electric Company — Bridgeport

Platers
Christie Plating Co — Groton
Patent Button Co The — Waterbury
Plainville Electro Plating Co The — Plainville
Waterbury Plating Company — Waterbury
Chromium Process Company The (Chromium Plating only) — Derby

Platers—Chrome
Plainville Electro Plating Co The — Plainville

Platers' Equipment
Apothecaries Hall Company — Waterbury
MacDermid Incorporated — Waterbury

Platers Metal
Plume & Atwood Mfg Co The — Thomaston

Plating
Conn Metal Finishing Co — Hamden

Plating Processes and Supplies
United Chromium Incorporated — Waterbury

Plumbers' Brass Goods
Bridgeport Brass Co — Bridgeport
Keeney Mfg Co The (special bends) — Newington
Scovill Manufacturing Company — Waterbury 48

Plumbing Specialties
John M Russell Mfg Co Inc — Naugatuck

Pole Line Hardware
Malleable Iron Fittings Co — Branford

Polishing Wheels
Williamsville Buff Mfg Co The — Danielson

Poly Chokes
Poly Choke Company The (a shotgun choking device) — Tariffville

Postage Meters
Pitney-Bowes Inc — Stamford

Precious Metals
J M Ney Company The (for industry) — Hartford

Prefabricated Buildings
City Lumber Co of Bridgeport Inc The — Bridgeport

Preserves
Goodman Bros (and jellies) — Meriden

Preservatives—Wood, Rope, Fabric
Darworth Incorporated ("Cuprinol") — Simsbury

Press Buttons
Gaynor Electric Company Inc — Bridgeport

Press Papers
Case Brothers Inc — Manchester

Presses
Henry & Wright Manufacturing Company The (automatic mechanical) — Hartford
Standard Machinery Co The (plastic molding, embossing, and die cutting) — Mystic

Presses—Power
Waterbury Farrel Foundry & Machine Co The — Waterbury

Pressure Vessels
Norwalk Tank Co Inc The (unfired to ASME Code Par U 69-70) — South Norwalk

Printing
Case Lockwood & Brainard A Division of Connecticut Printers Inc — Hartford
Heminway Corporation The — Waterbury
Hunter Press — Hartford
New Haven Printing Company The — New Haven
Taylor & Greenough Co The — Hartford
T B Simonds Inc — Hartford
The Walker-Rackliff Company — New Haven

Printing Machinery
Thomas W Hall Company — Stamford

Printing Presses
Bauthin Engineering Co (automatic) — Bridgeport

Printing Rollers
Chambers-Storck Company Inc The (engraved) — Norwich

Production Control Equipment
United Cinephone Corporation — Torrington
Wassell Organization (Produc-Trol) — Westport

Production Welding
Consolidated Industries — West Cheshire

Propellers—Aircraft
Hamilton Standard Propellers Div United Aircraft Corp — East Hartford

Propeller Fan Blades
Torrington Manufacturing Co The — Torrington

Pumps
Yale & Towne Manufacturing Company The (Tri-rotor) — Stamford

Pumps—Small Industrial
Eastern Industries Inc — New Haven

Pump Valves
Colt's Manufacturing Company — Hartford

Punches
Hoggson & Pettis Mfg Co The (ticket & cloth) 141 Brewery St — New Haven

Putty Softeners—Electrical
Fletcher Terry Co The — Box 415 Forestville

Pyrometers
Bristol Co The (recording and controlling) — Waterbury

Quartz Crystals
Crystal Research Laboratories Inc — Hartford

Radiation-Finned Copper
G & O Manufacturing Company The — New Haven
Vulcan Radiator Co The (steel and copper) — Hartford

Radio and Television Components
General Electric Company — Bridgeport

Radio Receivers
General Electric Company — Bridgeport

Rayon Specialties
Hartford Rayon Corporation The — Rocky Hill

Rayon Yarns
Hartford Rayon Corporation The — Rocky Hill

Reamers
O K Tool Co Inc The (inserted tooth) 33 Hull St — Shelton

Recorders
Bristol Co The (automatic controllers, temperature, pressure, flow, humidity) — Waterbury

Reduction Gears
Snow-Nabstedt Gear Corp The — New Haven

Refractories
Howard Company — New Haven

Regulators
Norwalk Valve Company (for gas and air) — South Norwalk

Resistance Wire
C O Jelliff Mfg Co The (nickel, chromium, kanthal) — Southport

Respirators
American Optical Company Safety Division — Putnam

Retainers
Hartford Steel Ball Co The (bicycle & automotive) — Hartford

Riveting Machines
Grant Mfg & Machine Co The — Bridgeport
H P Townsend Manufacturing Co The — Hartford
L-R Mfg Div of The Ripley Co — Torrington
Raybestos Div of Raybestos-Manhattan Inc The (brake service equipment) — Bridgeport

Rivets
Blake & Johnson Co The (brass, copper and non-ferrous) — Waterville
Clark Brothers Bolt Co — Milldale
Connecticut Manufacturing Company The — Waterbury
J H Session & Sons — Bristol
Raybestos Div of Raybestos-Manhattan Inc The (brass and aluminum tubular and solid copper) — Bridgeport
Raybestos Div of Raybestos-Manhattan Inc The (iron) — Bridgeport

Roasters—Electric
General Electric Company — Bridgeport

Rods
Bristol Brass Corp The (brass and bronze) — Bristol
Scovill Manufacturing Company (Brass and Bronze) — Waterbury 91

Roller Skates
Winchester Repeating Arms Company Division Olin Industries Inc — New Haven

Rolling Mills and Equipment
Waterbury Farrel Foundry & Machine Co The — Waterbury

Rubber Chemicals
Naugatuck Chemical Division United States Rubber Co — Naugatuck
Stamford Rubber Supply Co The ("Factice" Vulcanized Vegetable Oils) — Stamford

Rubberized Fabrics
Duro-Gloss Rubber Co The — New Haven

Rubber Footwear
Goodyear Rubber Co The — Middletown
United States Rubber Prod Inc (Keds, Kedettes, Gaytees, U S Royal Footwear) — Naugatuck

Rubber Gloves
Seamless Rubber Company The — New Haven

Rubber Heels
Danbury Rubber Co Inc The — Danbury

Rubber Latex Compounds and Dispersions
Naugatuck Chemical Division United States Rubber Co (coating, impregnating and adhesive compounds) — Naugatuck

Rubber Products, Mechanical
Auburn Manufacturing Company The (washers, gaskets, molded parts) — Middletown

Rubber—Reclaimed
Naugatuck Chemical Division United States Rubber Co — Naugatuck

Rubber Soles
Danbury Rubber Co Inc The — Danbury

Rubber Tile
Danbury Rubber Co Inc The — Danbury

Rubbish Burners
John P Smith Co The — 423-33 Chapel St New Haven

Safety Clothing
American Optical Company Safety Division — Putnam

Safety Fuses
Ensign-Bickford Co The (mining & detonating) — Simsbury

Safety Gloves and Mittens
American Optical Company Safety Division — Putnam

Safety Goggles
American Optical Company Safety Division — Putnam

Sandblasting
Beij & Williams Co The — Hartford

Sandwich Grills—Electric
General Electric Company — Bridgeport

Saw Blades
Capewell Mfg Co The (Hack Saw, Band Saw) — Hartford

Saws, Band, Metal Cutting
Atlantic Saw Mfg Co — New Haven

Scales—Industrial Dial
Kron Company The — Bridgeport

Scissors
Acme Shear Company The — Bridgeport

Screens
Hartford Wire Works Co The (Windows, Doors and Porches) — Hartford

Screw Caps
Weimann Bros Mfg Co The (small for bottles) — Derby

Screws
Atlantic Screw Work (wood) — Hartford
Blake & Johnson Co The (machine and wood) — Waterville
Bristol Company The (socket set and socket cap screws) — Waterbury
Charles Parker Co The (wood) — Meriden
Clark Brothers Bolt Co — Milldale
Connecticut Mfg Co The (machine) — Waterbury
Corbin Screw Div American Hardware Corp — New Britain
Holo-Krome Screw Corporation The (socket set and socket cap) — West Hartford
Scovill Manufacturing Company — Waterbury 91

Screw Machines
H P Townsend Mfg Company The — Hartford

Screw Machine Accessories
Barnaby Manufacturing and Tool Company — Bridgeport

Screw Machine Products
Apex Tool Co Inc The — Bridgeport
Blake & Johnson Co The — Waterville
Bristol Screw Corporation — Plainville
Centerless Grinding Co Inc The (Heat treated and ground type only) 19 Staples Street — Bridgeport
Connecticut Manufacturing Company The — Waterbury
Consolidated Industries — West Cheshire
Corbin Screw Div American Hardware Corp — New Britain
Duda & Goodwin Mfg Co — Woodbury
Eastern Machine Screw Corp The Truman & Barclay Sts — New Haven
Greist Mfg Co The (Up to 1½" capacity) — New Haven
Humason Mfg Co The — Forestville
Lowe Mfg Co The — Wethersfield
National Automatic Products Company The — New Britain
Nelson's Screw Machine Products — Plantsville
New Britain Machine Company The — New Britain
Olson Brothers Company (up to ¾" capacity) — Plainville
Peck Spring Co The — Plainville
Scovill Manufacturing Company — Waterbury 91
Wallace Metal Products Co Inc — New Haven
Waterbury Machine Tools & Products Co (B & S & Swiss type automatic) — Waterbury
Watkins Manufacturing Co Inc — Milford

Screw Machine Tools
Somma Tool Co (precision circular form tools) — Waterbury

Screws—Socket
Allen Manufacturing Company The — Hartford

Sealing Tape Machines
Better Packages Inc — Shelton

(Advt.)

Sewing Machines
Greist Mfg Co The (Sewing machine attachments) 503 Blake St New Haven
Merrow Machine Co The (Industrial) Hartford
Singer Manufacturing Company The (industrial) Bridgeport

Shaving Soaps
J B Williams Co The Glastonbury

Shears
Acme Shear Co The (household) Bridgeport

Shells
Wolcott Tool and Manufacturing Company Inc Waterbury

Sheet Metal Products
American Brass Co The (brass and copper) Waterbury
Merriam Mfg Co (security boxes, fitted tool boxes, tackle boxes, displays) Durham
Plume & Atwood Mfg Co The Waterbury
United Advertising Corp Manufacturing Division (Job and Production Runs) New Haven
Waterbury Companies Inc Waterbury

Sheet Metal Stampings
American Buckle Co The West Haven
DooVal Tool & Mfg Inc The Naugatuck
J H Sessions & Son Bristol
Patent Button Co The Waterbury
Plume & Atwood Mfg Co The Waterbury
Waterbury Companies Inc Waterbury

Shipment Sealers
Better Packages Inc Shelton

Shoe and Corset Laces
Ansonia O & C Co Ansonia

Showcase Lighting Equipment
Wiremold Company The Hartford

Shower Stalls
Dextone Company New Haven

Signals
H C Cook Co The (for card files) 32 Beaver St Ansonia

Sizing and Finishing Compounds
American Cyanamid & Chemical Corp Waterbury

Slide Fasteners
G E Prentice Mfg Co The Kensington
North & Judd Manufacturing Co New Britain
Shoe Hardware Div U S Rubber Company KwiK zippers) Waterbury

Smoke Stacks
Bigelow Company The (steel) New Haven

Soap
J B Williams Co The (industrial soaps, toilet soaps, shaving soaps) Glastonbury

Solder—Soft
Torrey S Crane Company Plantsville

Special Machinery
Henry & Wright Manufacturing Company The Hartford
H P Townsend Mfg Company The Hartford
Lundeberg Engineering Company Hartford
National Sherardizing & Machine Co (mandrels & stock shells for rubber industry) Hartford
Swan Tool & Machine Co The Hartford

Special Parts
Greist Mfg Co The (small machines, especially precision stampings) New Haven

Special Industrial Locking Devices
Corbin Cabinet Lock Div American Hardware Corp New Britain

Special Tools & Dies
Lundeberg Engineering Company Hartford

Spinnings
Gray Manufacturing Company The Hartford

Sponge Rubber
Sponge Rubber Products Co The Shelton

Spreads
Palmer Brothers Co Fitchville

Spring Coiling Machines
Torrington Manufacturing Co The Torrington

Spring Units
Owen Silent Spring Co Inc (mattreses and furniture) Bridgeport

Spring Washers
Wallace Barnes Co The Div Associated Spring Corp Bristol

Springs—Coil & Flat
Han-Dee Spring and Manufacturing Co The (Coil and Flat) Hartford
Humason Mfg Co The Forestville
New England Spring Manufacturing Company Unionville
Peck Spring Co The Plainville
Wallace Barnes Co The Div Associated Spring Corp Bristol

Springs—Flat
Wallace Barnes Co The Div Associated Spring Corp Bristol
New England Spring Manufacturing Company Unionville

Springs—Furniture
Owen Silent Spring Co Inc Bridgeport

Springs—Wire
Colonial Spring Corporation The Hartford
Connecticut Spring Corporation The (compression, extension, torsion) Hartford

Springs—Wire (continued)
D R Templeman Co (jewelry) Plainville
J W Bernston Company (Coil and Torsion) Plainville
New England Spring Mfg Co Unionville
Wallace Barnes Co The Div Associated Spring Corp Bristol

Springs, Wire & Flat
Autoyre Company The Oakville

Stair Pads
Palmer Brothers Company New London

Stamps
Hoggson & Pettis Mfg Co The (steel) 141 Brewery St New Haven
Parker Stamp Works Inc The (steel) Hartford

Stampings
DooVal Tool & Mfg Inc The Naugatuck
Han-Dee Spring and Manufacturing Co The (Small) Hartford
Plume & Atwood Mfg Co The (small) Waterbury

Stampings—Small
Greist Manufacturing Co The New Haven
L C White Company The Waterbury
Rogers Corporation (Fibre Cellulose Paper) Manchester
Scovill Manufacturing Company Waterbury 91
Wallace Barnes Co The Div Associated Spring Corp Bristol
Waterbury Companies Inc Waterbury

Steel
Stanley Works The (hot and cold rolled strip) New Britain

Steel Castings
Hartford Electric Steel Co The (carbon and alloy steel) 540 Flatbush Ave Hartford
Malleable Iron Fittings Co Branford
Nutmeg Crucible Steel Co Branford

Steel—Cold Rolled Spring
Wallace Barnes Co The Div Associated Spring Corp Bristol

Steel—Cold Rolled Stainless
Wallingford Steel Company Wallingford

Steel—Cold Rolled Strip and Sheets
Wallingford Steel Company Wallingford

Steel Goods
Merriam Mfg Co (sheets products to order) Durham
Waterbury Companies Inc Waterbury

Steel Strapping
Stanley Works The New Britain

Stereotypes
W T Barnum & Co Inc New Haven

Stop Clocks, Electric
H C Thompson Clock Co The Bristol

Straps, Leather
Auburn Manufacturing Company The (textile, industrial, skate, carriage) Middletown

Studio Couches
Waterbury Mattress Co Waterbury

Super Refractories
Mullite Refractories Co The Shelton

Surface Metal Raceways & Fittings
Wiremold Company The Hartford

Surgical Dressings
Acme Cotton Products Co Inc East Killingly
Seamless Rubber Company The New Haven

Surgical Rubber Goods
Seamless Rubber Company The New Haven

Switches—Electric
General Electric Company Bridgeport

Switchboards Wire and Cables
Rockbestos Products Corp (asbestos insulated) New Haven

Synchronous Motors
R W Cramer Company Inc The Centerbrook
Haydon Manufacturing Co Inc Torrington

Tanks
Bigelow Company The (steel) New Haven
State Welding Co The Hartford
Storts Welding Company (steel and alloy) Meriden

Tape
Russell Mfg Co The Middletown

Tap Extractors
Walton Company The West Hartford

Taps, Collapsing
Geometric Tool Co The New Haven

Tarred Lines
Brownell & Co Inc Moodus

Tea
Upham Food Products Inc package and tea balls) Hawleyville

Telemetering Instruments
Bristol Co The Waterbury

Television Receivers
General Electric Company Bridgeport

Textile Machinery
Merrow Machine Co The 2814 Laurel St Hartford

Textile Mill Supplies
Ernst Bischoff Company Inc Ivoryton

Textile Processors
American Dyeing Corporation (rayon, acetate) Rockville
Aspinook Corp The (cotton) Jewett City

Therapeutic Equipment
Airadio Incorporated Stamford

Thermometers
Bristol Co The (recording and automatic control) Waterbury
Manning Maxwell & Moore Inc Bridgeport

Thermostats
Bridgeport Thermostat Company Inc (automatic) Bridgeport

Thin Gauge Metals
Plume & Atwood Mfg Co The Thomaston
Thinsheet Metals Co The (plain or tinned in rolls) Waterbury

Thread
American Thread Co The Willimantic
Belding Heminway Corticelli Putnam
Gardner Hall Jr Co The (cotton sewing) South Willington
Lloyd E Cone Thread Co The (industrial cotton sewing) Moodus
Max Pollack & Co Inc Groton and Willimantic
Wm Johl Manufacturing Co Mystic

Threading Machines
Grant Mfg & Machine Co The (double and automatic) Bridgeport

Time Recorders
Stromberg Time Corp Thomaston

Time Switches
A W Hayden Co The Waterbury

Timers, Interval
Haydon Manufacturing Co Inc Torrington
H C Thompson Clock Co The Bristol
R W Cramer Company Inc The Centerbrook

Timing Devices
A W Hayden Co The Waterbury
Haydon Manufacturing Co Inc Torrington
R W Cramer Company Inc The Centerbrook
Seth Thomas Clocks Thomaston
United States Time Corporation The Waterbury

Timing Devices & Time Switches
Haydon Manufacturing Co Inc Torrington
M H Rhodes Inc Hartford

Tinning
Thinsheet Metals Co The (non-ferrous metals in rolls) Waterbury
Wilcox Crittenden & Co Inc Middletown

Tool Designing
American Standard Co Plantsville

Tools
Hoggson & Pettis Mfg Co The (rubber workers) 141 Brewery St New Haven
O K Tool Co Inc The (inserted tooth metal cutting) 33 Hull St Shelton

Tool Chests
Vanderman Manufacturing Co The Willimantic

Tools & Dies
Moore Special Tool Co Bridgeport
Swan Tool & Machine Co The Hartford

Tools, Dies & Fixtures
Fonda Gage Company (also jigs) Stamford
Grandahl Tool and Machine Company Hartford
Greist Mfg Co The New Haven

Tools, Hand & Mechanical
Bridgeport Hardware Mfg Corp The (screw drivers, nail pullers, box tools, wrenches, auto tools, forgings & specialties) Bridgeport

Toys
A C Gilbert Company New Haven
Geo S Scott Mfg Co The Wallingford
Gong Bell Co The East Hampton
N N Hill Brass Co The East Hampton
Waterbury Companies Inc Waterbury

Trucks—Industrial
George P Clark Co Windsor Locks

Trucks—Lift
Excelsior Hardware Co The Stamford
George P Clark Co Windsor Locks

Trucks—Skid Platforms
Excelsior Hardware Co The (lift) Stamford

Tube Bending
American Tube Bending Co Inc New Haven

Tube Clips
H C Cook Co The (for collapsible tubes) 32 Beaver St Ansonia
Weimann Bros Mfg Co The (for collapsible tubes) Derby

Tubing
American Brass Co The (brass and copper) Waterbury
Scovill Manufacturing Company (Brass and Copper) Waterbury 91

Tubing—Heat Exchanger
Scovill Manufacturing Company Waterbury 91

(Advt).

It's Made in Connecticut

Typewriters
Royal Typewriter Co Inc — Hartford
Underwood Corporation — Hartford

Typewriters—Portable
Underwood Corporation — Hartford

Typewriter Ribbons and Supplies
Underwood Corporation — Hartford and Bridgeport

Undercleaner Rolls
Sonoco Products Co (Climax-Lowell Div) — Mystic

Union Pipe Fittings
Corley Co Inc The (300# AAR) — Plainville

Upholstery Fabrics—Woolen & Worsted
Broad Brook Company (automobile, airplane, railroad) — Broad Brook

Vacuum Bottles and Containers
American Thermos Bottle Co — Norwich

Vacuum Cleaners
Electrolux Corporation — Old Greenwich
Spencer Turbine Co The — Hartford

Valves
Norwalk Valve Company (sensitive check valves) — South Norwalk
W S Rockwell Company (Industrial) — Fairfield

Valve Discs
Colt's Manufacturing Company — Hartford

Valves—Automatic Air
Beaton & Cadwell Mfg Co — New Britain

Valves—Automobile Tire
Bridgeport Brass Company — Bridgeport

Valves—Radiator Air
Bridgeport Brass Company — Bridgeport

Valves—Relief & Control
Beaton & Cadwell Mfg Co — New Britain

Valves—Safety & Relief
Manning Maxwell & Moore Inc — Bridgeport

Varnishes
Staminite Corp The — New Haven

Velvets
American Velvet Co (owned and operated by A Wimpfheimer & Bro Inc) — Stonington
Leiss Velvet Mfg Co Inc The — Willimantic
Velvet Textile Corporation The (velveteen) — West Haven

Ventilating Systems
Colonial Blower Company — Plainville
Connecticut Blower Company — Hartford

Vibrators—Pneumatic
New Haven Vibrator Company (industrial) — New Haven

Vises
Charles Parker Co The — Meriden
Fenn Manufacturing Company The (Quick-Action Vises) — Hartford
Vanderman Manufacturing Co. The (Combination Bench Pipe) — Willimantic

Waffle Irons—Electric
General Electric Company — Bridgeport

Washers
American Felt Co (felt) — Glenville
Auburn Manufacturing Company The (all materials) — Middletown
Blake & Johnson The (brass, copper & non-ferrous) — Waterville
Clark Brothers Bolt Co — Milldale
J H Sessions & Son — Bristol
Plume & Atwood Mfg Co The (brass & copper) — Waterbury
Raybestos Div of Raybestos-Manhattan Inc The (clutch washers) — Bridgeport
Saling Manufacturing Company (made to order) — Unionville
Sessions Foundry Co The (cast iron) — Bristol

Washers—Felt
Chas W. House & Sons Inc (Mills & Cutting Plant) — Unionville

Washing Machines—Electric
General Electric Company — Bridgeport

Watches
Benrus Watch Co — 30 Cherry St Waterbury
E Ingraham Co The — Bristol
New Haven Clock and Watch Co The (pocket & wrist) — New Haven
United States Time Corporation The — Waterbury

Waterproof Dressings for Leather
Viscol Company The — Stamford

Wedges
Saling Manufacturing Company (hammer & axe) — Unionville

Welding
G E Wheeler Company (Fabrication of Steel & Non-Ferrous Metals) — New Haven
Industrial Welding Company (Equipment Manufacturers—Steel Fabricators) — Hartford
Porcupine Company The — Bridgeport
State Welding Co The (Equipment Mfrs & Steel Fabricators) — Hartford

Welding—Lead
Storts Welding Company (tanks and fabrication) — Meriden

Welding Rods
Bristol Brass Co The (brass & bronze) — Bristol

Wheels—Industrial
George P Clark Co — Windsor Locks

Wicks
Auburn Manufacturing Company The (felt, asbestos) — Middletown
Raybestos Div of Raybestos-Manhattan Inc The (oil burner wicks) — Bridgeport
Russell Mfg Co The — Middletown

Window & Door Guards
Hartford Wire Works Co The — Hartford

Wire
Atlantic Wire Co The (steel) — Branford
Bartlett Hair Spring Wire Co The (Hair Spring) — North Haven
Bristol Brass Corp The (brass & bronze) — Bristol
Driscoll Wire Co The (steel) — Shelton
Hudson Wire Co Winsted Div (insulated & enameled magnet) — Winsted
Platt Bros & Co The (zinc wire) P O Box 1030 — Waterbury
Plume & Atwtood Mfg Co The (brass, bronze, nickel silver) — Thomaston
Scovill Manufacturing Company (Brass, Bronze and Nickel Silver) — Waterbury 91

Wire Arches & Trellises
Hartford Wire Works Co The — Hartford
John P Smith Co The 423-33 Chapel St — New Haven

Wire Baskets
Rolock Inc (for acid, heat, degreasing) — Fairfield

Wire Cable
Bevin-Wilcox Line Co The (braided) — East Hampton

Wires and Cable
General Electric Company (for central stations, industrial and mining applications) — Bridgeport
Rockbestos Products Corporation (asbestos insulated — New Haven

Wires—Building
General Electric Company — Bridgeport

Wires—Telephone
General Electric Company — Bridgeport

Wire Cloth
Hartford Wire Works Co The — Hartford
C O Jelliff Mfg Co The (all metals, all meshes) — Southport
John P Smith Co The 423-33 Chapel St — New Haven
Rolock Incorporated — Fairfield

Wire Drawing Dies
Waterbury Wire Die Co The — Waterbury

Wire Dipping Baskets
Hartford Wire Works Co The — Hartford
John P Smith Co The 423-33 Chapel St — New Haven

Wire—Enameled Magnet
Sweet Wire Co — Winsted

Wire Formings
Autoyre Co The — Oakville
G E Prentice Mfg Co The — Kensington
Verplex Company The — Essex

Wire Forms
Colonial Spring Corporation The — Hartford
Connecticut Spring Corporation The — Hartford
Humason Mfg Co The — Forestville
New England Spring Mfg Co — Unionville
Wallace Barnes Co The Div Associated Spring Corp — Bristol

Wire Goods
American Buckle Co The (overall trimmings) — West Haven
Patent Button Co The — Waterbury
Scovill Manufacturing Company (To Order) — Waterbury 91

Wiremolding
Wiremold Company The — Hartford

Wire Partitions
Hartford Wire Works Co The — Hartford
John P Smith Co The 423-33 Chapel St — New Haven

Wire Products
Clairglow Mfg Company — Portland
Plume & Atwood Mfg Co The (to order) — Waterbury

Wire Reels
A H Nilson Mach Co The — Bridgeport

Wire Rings
American Buckle Co The (pan handles and tinners' trimmings) — West Haven

Wire Shapes
Bridgeport Chain & Mfg Co — Bridgeport

Wire—Specialties
Andrew B Hendryx Co The — New Haven

Wood Handles
Salisbury Cutlery Handle Co The (for cutlery & small tools) — Salisbury

Woodwork
C H Dresser & Son Inc (Mfg all kinds of woodwork) — Hartford
Hartford Builders Finish Co — Hartford

Woven Awning Stripes
Falls Company The — Norwich

Woven Felts—Wool
Chas W. House & Sons Inc (Mills & Cutting Plant) — Unionville

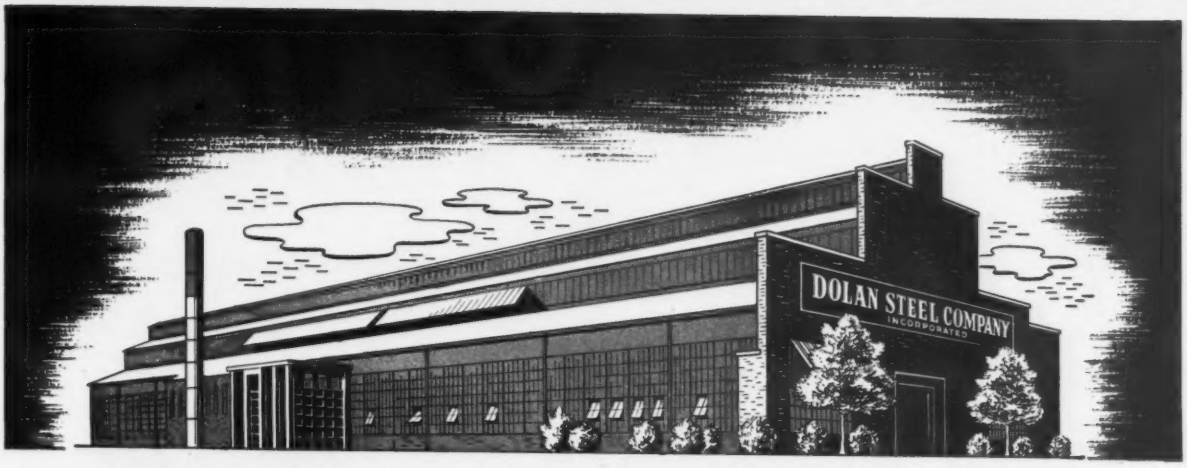
Yarns
Hartford Spinning Incorporated (Woolen, knitting and weaving yarns) — Unionville
Aldon Spinning Mills Corporation The (fine woolen and specialty) — Talcottville
Ensign-Bickford Co The (jute carpet) — Simsbury

Zinc
Platt Bros & Co The (ribbon, strip and wire) P O Box 1030 — Waterbury

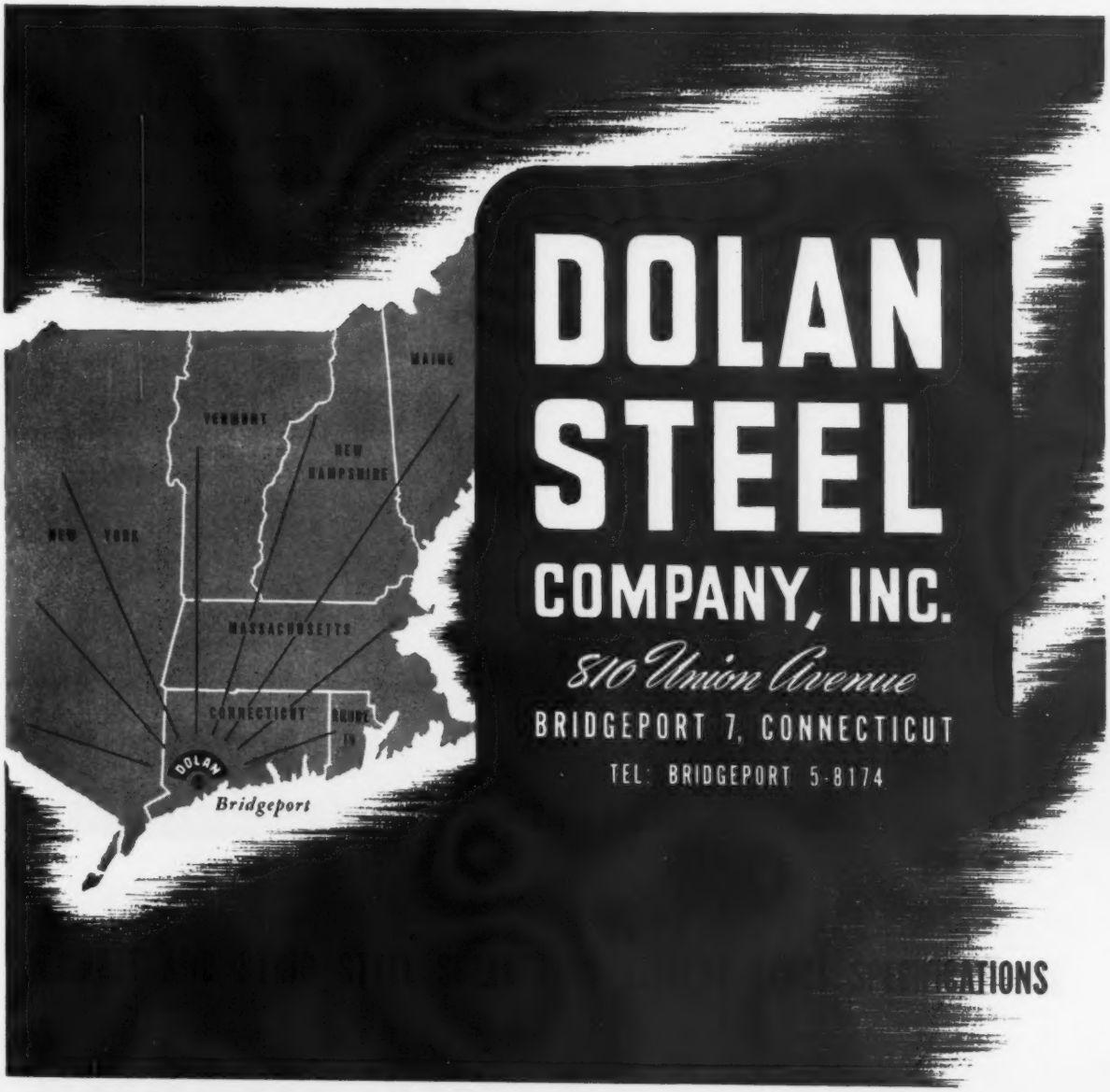
Zinc Castings
Newton-New Haven Co Inc — 688 Third Ave West Haven

Advertising Index

American Appraisal Co., The 18
Avery and Saul Co. 22
Bader Co., The C. A. 18-30
Barney's 28
Brett Co., E. W. 38
Case, Lockwood & Brainard, Div. of Conn. Printers, Inc. 6
Decker Metals, Inc. 28
Detroit Steel Corp. 31
Dolan Steel Co., Inc. Inside Back Cover
Dolge Company, The C. B. 20
Dowd, Wyllie & Olson, Inc. 6
Eastern Machinery Co., The 40
Edgcomb Steel of New England, Inc. 33
Flint Co., A. W. 23
Fostoria Infrared Service, Inc. 24
Fuller Brush Co., The 16
Gair Company, Inc., Robert 4
General Electric Co. 5
Geometric Tool Co., The 40
Gray Manufacturing Co., The 3
Hall Company, Inc., Thomas W. 38
Hampden Brass & Aluminum Co. 39
Hartford Special Machinery Co., The 30
Hershman & Loveland 24
Howard Co., The 33
Industrial Models 41
Island Equipment Co. 25
Jones & Company, Inc., T.A.D. 26
Kasden & Sons, H., Inc. Inside Front Cover
Kellogg & Bulkeley, Div. of Conn. Printers, Inc. 23
King Co., The Alfred B. 37
Liberty Mutual Insurance Co. 2
Maier & Co., Ward 30
Manternach, Inc. 27
Mathewson Machine Works, Inc. 15
Mercer & Stewart Co., The 21
Merritt & Co., Joseph 21
Northern Heating Supplies, Inc. 21
Nutmeg Crucible Steel Co., The 24
Ormsbee, Moore & Gilbert Outside Back Cover
Robertson Paper Box Co., Inc. 17
Russell Co., Edw. E. 36
SoundScriber Corp., The 19
Souther Engineering Co., The Henry 21
Southern New England Telephone Co. 6
Swan Tool & Machine Co., The 30
Thompson Water Cooler Co. 22
Tyler Equipment Corp. 32
Wallace Barnes Co. 20
Westcott & Mapes 24
Wiremold Co., The 35
Youngberg Bros. 30



The ONLY Warehouse in Connecticut dealing EXCLUSIVELY in SHEET and STRIP STEEL



DOLAN STEEL COMPANY, INC.

810 Union Avenue

BRIDGEPORT 7, CONNECTICUT

TEL: BRIDGEPORT 5-8174

...ATIONS

Advertising is not a business expense.
It gets business!

There is only one kind of good advertising . . .
the kind that can be measured in increased sales and profits.
This advertising is an active force that can make the difference
between your business success and failure.
Any other kind of advertising is a waste.

You can be sure of good advertising by
selecting the right advertising counsel.
We will be glad to analyse your advertising without obligation.

★ *THE RIGHT STORY TO THE RIGHT PEOPLE*
AT THE RIGHT TIME.

ORMSBEE, MOORE & GILBERT
Advertising
MILFORD, CONNECTICUT

CASE, LOCKWOOD AND BRAINARD
Hartford 1948 Connecticut